```
In [1]: pip install tensorflow-gpu
        Collecting tensorflow-gpuNote: you may need to restart the kernel to use updated packages.
          Downloading tensorflow gpu-2.8.0-cp38-cp38-win amd64.whl (438.0 MB)
        Collecting absl-py>=0.4.0
          Downloading absl_py-1.0.0-py3-none-any.whl (126 kB)
        Collecting flatbuffers>=1.12
          Downloading flatbuffers-2.0-py2.py3-none-any.whl (26 kB)
        Requirement already satisfied: typing-extensions>=3.6.6 in c:\programdata\anaconda3\lib\site-packages (from tenso
        rflow-gpu) (3.7.4.3)
        Collecting libclang>=9.0.1
          Downloading libclang-14.0.1-py2.py3-none-win_amd64.whl (14.2 MB)
        Requirement already satisfied: wrapt>=1.11.0 in c:\programdata\anaconda3\lib\site-packages (from tensorflow-gpu)
        (1.12.1)
        Collecting keras-preprocessing>=1.1.1
          Using cached Keras_Preprocessing-1.1.2-py2.py3-none-any.whl (42 kB)
        Collecting tensorflow-io-gcs-filesystem>=0.23.1
          Downloading tensorflow_io_gcs_filesystem-0.25.0-cp38-cp38-win_amd64.whl (1.5 MB)
        Collecting gast>=0.2.1
          Downloading gast-0.5.3-py3-none-any.whl (19 kB)
        Collecting opt-einsum>=2.3.2
          Using cached opt einsum-3.3.0-py3-none-any.whl (65 kB)
        Collecting protobuf>=3.9.2
          Downloading protobuf-3.20.1-cp38-cp38-win_amd64.whl (904 kB)
        Collecting google-pasta>=0.1.1
          Using cached google_pasta-0.2.0-py3-none-any.whl (57 kB)
        Requirement already satisfied: h5py>=2.9.0 in c:\programdata\anaconda3\lib\site-packages (from tensorflow-gpu) (2
        Requirement already satisfied: numpy>=1.20 in c:\programdata\anaconda3\lib\site-packages (from tensorflow-gpu) (1
        .20.1)
        Requirement already satisfied: six>=1.12.0 in c:\programdata\anaconda3\lib\site-packages (from tensorflow-gpu) (1
        .15.0)
        Collecting keras<2.9,>=2.8.0rc0
          Downloading keras-2.8.0-py2.py3-none-any.whl (1.4 MB)
        Collecting tf-estimator-nightly==2.8.0.dev2021122109
          Downloading tf estimator nightly-2.8.0.dev2021122109-py2.py3-none-any.whl (462 kB)
        Collecting grpcio<2.0,>=1.24.3
          Downloading grpcio-1.46.1-cp38-cp38-win amd64.whl (3.5 MB)
        Collecting astunparse>=1.6.0
          Using cached astunparse-1.6.3-py2.py3-none-any.whl (12 kB)
        Requirement already satisfied: setuptools in c:\programdata\anaconda3\lib\site-packages (from tensorflow-gpu) (52
        .0.0.post20210125)
        Collecting tensorboard<2.9,>=2.8
          Downloading tensorboard-2.8.0-py3-none-any.whl (5.8 MB)
        Collecting termcolor>=1.1.0
          Using cached termcolor-1.1.0.tar.gz (3.9 kB)
        Requirement already satisfied: wheel<1.0,>=0.23.0 in c:\programdata\anaconda3\lib\site-packages (from astunparse>
        =1.6.0->tensorflow-gpu) (0.36.2)
        Collecting tensorboard-plugin-wit>=1.6.0
          Downloading tensorboard plugin wit-1.8.1-py3-none-any.whl (781 kB)
        Collecting markdown>=2.6.8
          Downloading Markdown-3.3.7-py3-none-any.whl (97 kB)
        Collecting google-auth<3,>=1.6.3
          Downloading google_auth-2.6.6-py2.py3-none-any.whl (156 kB)
        Requirement already satisfied: requests<3,>=2.21.0 in c:\programdata\anaconda3\lib\site-packages (from tensorboar
        d<2.9,>=2.8->tensorflow-gpu) (2.25.1)
        Collecting tensorboard-data-server<0.7.0,>=0.6.0
          Using cached tensorboard data_server-0.6.1-py3-none-any.whl (2.4 kB)
        Collecting google-auth-oauthlib<0.5.>=0.4.1
          Using cached google auth oauthlib-0.4.6-py2.py3-none-any.whl (18 kB)
        Requirement already satisfied: werkzeug>=0.11.15 in c:\programdata\anaconda3\lib\site-packages (from tensorboard<
        2.9,>=2.8->tensorflow-gpu) (1.0.1)
        Collecting rsa<5,>=3.1.4
          Downloading rsa-4.8-py3-none-any.whl (39 kB)
        Collecting cachetools<6.0,>=2.0.0
          Downloading cachetools-5.0.0-py3-none-any.whl (9.1 kB)
        Collecting pyasn1-modules>=0.2.1
          Using cached pyasn1_modules-0.2.8-py2.py3-none-any.whl (155 kB)
        Collecting requests-oauthlib>=0.7.0
          Downloading requests_oauthlib-1.3.1-py2.py3-none-any.whl (23 kB)
        Collecting importlib-metadata>=4.4
          Downloading importlib_metadata-4.11.3-py3-none-any.whl (18 kB)
        Requirement already satisfied: zipp>=0.5 in c:\programdata\anaconda3\lib\site-packages (from importlib-metadata>=
        4.4->markdown>=2.6.8->tensorboard<2.9,>=2.8->tensorflow-gpu) (3.4.1)
        Collecting pyasn1<0.5.0,>=0.4.6
          Using cached pyasn1-0.4.8-py2.py3-none-any.whl (77 kB)
        Requirement already satisfied: chardet<5,>=3.0.2 in c:\programdata\anaconda3\lib\site-packages (from requests<3,>
        =2.21.0->tensorboard<2.9,>=2.8->tensorflow-gpu) (4.0.0)
        Requirement already satisfied: urllib3<1.27,>=1.21.1 in c:\programdata\anaconda3\lib\site-packages (from requests
        <3,>=2.21.0->tensorboard<2.9,>=2.8->tensorflow-gpu) (1.26.4)
```

Requirement already satisfied: certifi>=2017.4.17 in c:\programdata\anaconda3\lib\site-packages (from requests<3,

```
>=2.21.0->tensorboard<2.9,>=2.8->tensorflow-gpu) (2020.12.5)
Requirement already satisfied: idna<3,>=2.5 in c:\programdata\anaconda3\lib\site-packages (from requests<3,>=2.21
.0->tensorboard<2.9,>=2.8->tensorflow-gpu) (2.10)
Collecting oauthlib>=3.0.0
 Downloading oauthlib-3.2.0-py3-none-any.whl (151 kB)
Building wheels for collected packages: termcolor
 Building wheel for termcolor (setup.py): started
Building wheel for termcolor (setup.py): finished with status 'done'
 Created wheel for termcolor: filename=termcolor-1.1.0-py3-none-any.whl size=4829 sha256=3dd1cd57fb3ab22d14ef391
d417ecc51d35a0f7f28cde08251ba7c108cdcaf91
  Stored in directory: c:\users\computing\appdata\local\pip\cache\wheels\a0\16\9c\5473df82468f958445479c59e784896
fa24f4a5fc024b0f501
Successfully built termcolor
Installing collected packages: pyasn1, rsa, pyasn1-modules, oauthlib, cachetools, requests-oauthlib, importlib-me
tadata, google-auth, tensorboard-plugin-wit, tensorboard-data-server, protobuf, markdown, grpcio, google-auth-oau
thlib, absl-py, tf-estimator-nightly, termcolor, tensorflow-io-gcs-filesystem, tensorboard, opt-einsum, libclang,
keras-preprocessing, keras, google-pasta, gast, flatbuffers, astunparse, tensorflow-gpu
 Attempting uninstall: importlib-metadata
    Found existing installation: importlib-metadata 3.10.0
    Uninstalling importlib-metadata-3.10.0:
      Successfully uninstalled importlib-metadata-3.10.0
Successfully installed absl-py-1.0.0 astunparse-1.6.3 cachetools-5.0.0 flatbuffers-2.0 gast-0.5.3 google-auth-2.6
```

Successfully installed absl-py-1.0.0 astunparse-1.6.3 cachetools-5.0.0 flatbuffers-2.0 gast-0.5.3 google-auth-2.6 .6 google-auth-oauthlib-0.4.6 google-pasta-0.2.0 grpcio-1.46.1 importlib-metadata-4.11.3 keras-2.8.0 keras-prepro cessing-1.1.2 libclang-14.0.1 markdown-3.3.7 oauthlib-3.2.0 opt-einsum-3.3.0 protobuf-3.20.1 pyasn1-0.4.8 pyasn1-modules-0.2.8 requests-oauthlib-1.3.1 rsa-4.8 tensorboard-2.8.0 tensorboard-data-server-0.6.1 tensorboard-plugin-wit-1.8.1 tensorflow-gpu-2.8.0 tensorflow-io-gcs-filesystem-0.25.0 termcolor-1.1.0 tf-estimator-nightly-2.8.0.dev 2021122109

Mario game setup

```
In [2]:
                 !pip install gym super mario bros==7.3.0 nes py
               Collecting gym super mario bros==7.3.0
                   Downloading gym_super_mario_bros-7.3.0-py2.py3-none-any.whl (198 kB)
               Collecting nes py
                   Downloading nes py-8.1.8.tar.gz (76 kB)
               Collecting gym>=0.17.2
                   Downloading gym-0.23.1.tar.gz (626 kB)
                   Installing build dependencies: started
                   Installing build dependencies: finished with status 'done'
                   Getting requirements to build wheel: started
                   Getting requirements to build wheel: finished with status 'done'
                       Preparing wheel metadata: started
                      Preparing wheel metadata: finished with status 'done'
               Requirement already satisfied: numpy>=1.18.5 in c:\programdata\anaconda3\lib\site-packages (from nes py) (1.20.1)
               Collecting pyglet<=1.5.11,>=1.4.0
                   Downloading pyglet-1.5.11-py3-none-any.whl (1.1 MB)
               Requirement already satisfied: tqdm>=4.48.2 in c:\programdata\anaconda3\lib\site-packages (from nes_py) (4.59.0)
               Requirement already satisfied: cloudpickle>=1.2.0 in c:\programdata\anaconda3\lib\site-packages (from gym>=0.17.2
               ->nes py) (1.6.0)
               Collecting gym-notices>=0.0.4
                   Downloading gym\_notices-0.0.6-py3-none-any.whl (2.7 kB)
               Requirement already satisfied: importlib-metadata>=4.10.0 in c:\programdata\anaconda3\lib\site-packages (from gym
               >=0.17.2->nes_py) (4.11.3)
               Requirement already satisfied: zipp>=0.5 in c:\programdata\anaconda3\lib\site-packages (from importlib-metadata>=
               4.10.0 - \text{gym} = 0.17.2 - \text{nes py} (3.4.1)
               Building wheels for collected packages: nes-py, gym
                   Building wheel for nes-py (setup.py): started
                   Building wheel for nes-py (setup.py): finished with status 'done'
                   Created wheel for nes-py: filename=nes_py-8.1.8-cp38-cp38-win_amd64.whl size=48004 sha256=ae8f846c1642221c78c82
               0413b60c470173d29651173238d52a53b1686c4bfdc
                   Stored in directory: c:\users\\computing\\appdata\\local\\pip\\cache\\wheels\\8d\\6e\\f0\\113c979eba40def28ee9b3c81a4adecdal\\pip\\cache\\wheels\\8d\\foelf0\\113c979eba40def28ee9b3c81a4adecdal\\pip\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foelfabetal\\foe
               00386106d81fb3bc2c2
                   Building wheel for gym (PEP 517): started
                   Building wheel for gym (PEP 517): finished with status 'done'
                   Created wheel for gym: filename=gym-0.23.1-py3-none-any.whl size=701357 sha256=acaa1749c0b20b2e51ebd21a373ba9a8
               9073918d5b39afbe0e78b71eb42e9937
                   Stored in directory: c:\users\computing\appdata\local\pip\cache\wheels\78\28\77\b0c74e80a2a4faae0161d5c53bc4f8e
               436e77aedc79136ee13
               Successfully built nes-py gym
               Installing collected packages: gym-notices, pyglet, gym, nes-py, gym-super-mario-bros
               Successfully installed qym-0.23.1 gym-notices-0.0.6 gym-super-mario-bros-7.3.0 nes-py-8.1.8 pyglet-1.5.11
```

```
In [3]:
```

```
In [4]: # Setup game
         env = gym super mario bros.make('SuperMarioBros-v0')
         env = JoypadSpace(env, SIMPLE MOVEMENT)
        C:\ProgramData\Anaconda3\lib\site-packages\ipykernel\ipkernel.py:287: DeprecationWarning: `should run async` will
        not call `transform_cell` automatically in the future. Please pass the result to `transformed cell` argument and
        any exception that happen during thetransform in `preprocessing exc tuple` in IPython 7.17 and above.
          and should run async(code)
        C:\ProgramData\Anaconda3\lib\site-packages\gym\envs\registration.py:505: UserWarning: WARN: The environment Super
        MarioBros-v0 is out of date. You should consider upgrading to version `v3` with the environment ID `SuperMarioBro
        logger.warn(
       Preprocessing the environment
In [5]:
         # Installing pytorch
         !pip install torch==1.10.1+cu113 torchvision==0.11.2+cu113 torchaudio===0.10.1+cu113 -f https://download.pytorch
        Looking in links: https://download.pytorch.org/whl/cu113/torch_stable.html
        Collecting torch==1.10.1+cu113
          Downloading https://download.pytorch.org/whl/cull3/torch-1.10.1%2Bcull3-cp38-win_amd64.whl (2442.4 MB)
        Collecting torchvision==0.11.2+cu113
          Downloading https://download.pytorch.org/whl/cull3/torchvision-0.11.2%2Bcull3-cp38-cp38-win amd64.whl (3.2 MB)
        Collecting torchaudio===0.10.1+cu113
          Downloading https://download.pytorch.org/whl/cull3/torchaudio-0.10.1%2Bcull3-cp38-cp38-win amd64.whl (336 kB)
        Requirement already satisfied: typing-extensions in c:\programdata\anaconda3\lib\site-packages (from torch==1.10.
        1+cu113) (3.7.4.3)
        Requirement already satisfied: pillow!=8.3.0,>=5.3.0 in c:\programdata\anaconda3\lib\site-packages (from torchvis
        ion==0.11.2+cu113) (8.2.0)
        Requirement already satisfied: numpy in c:\programdata\anaconda3\lib\site-packages (from torchvision==0.11.2+cu11
        3) (1.20.1)
        Installing collected packages: torch, torchvision, torchaudio
          Attempting uninstall: torch
            Found existing installation: torch 1.9.1
            Uninstalling torch-1.9.1:
              Successfully uninstalled torch-1.9.1
          Attempting uninstall: torchvision
            Found existing installation: torchvision 0.10.1
            Uninstalling torchvision-0.10.1:
              Successfully uninstalled torchvision-0.10.1
          Attempting uninstall: torchaudio
            Found existing installation: torchaudio 0.9.1
            Uninstalling torchaudio-0.9.1:
              Successfully uninstalled torchaudio-0.9.1
        Successfully installed torch-1.10.1+cull3 torchaudio-0.10.1+cull3 torchvision-0.11.2+cull3
In [6]:
         # Installing the stable baselines for Reinforcement Learning stuff
         !pip install stable-baselines3[extra]
        Collecting stable-baselines3[extra]
          Downloading stable baselines3-1.5.0-py3-none-any.whl (177 kB)
        Requirement already satisfied: cloudpickle in c:\programdata\anaconda3\lib\site-packages (from stable-baselines3[
        extra]) (1.6.0)
        Requirement already satisfied: matplotlib in c:\programdata\anaconda3\lib\site-packages (from stable-baselines3[e
        xtral) (3.3.4)
        Requirement already satisfied: pandas in c:\programdata\anaconda3\lib\site-packages (from stable-baselines3[extra
        1) (1.2.4)
        Requirement already satisfied: torch>=1.8.1 in c:\programdata\anaconda3\lib\site-packages (from stable-baselines3
        [extra]) (1.10.1+cu113)
        Requirement already satisfied: numpy in c:\programdata\anaconda3\lib\site-packages (from stable-baselines3[extra]
        ) (1.20.1)
        Collecting gym==0.21
          Downloading gym-0.21.0.tar.gz (1.5 MB)
        Collecting ale-py~=0.7.4
          Downloading ale_py-0.7.5-cp38-cp38-win_amd64.whl (935 kB)
        Collecting opency-python
          Downloading opencv python-4.5.5.64-cp36-abi3-win amd64.whl (35.4 MB)
        Requirement already satisfied: pillow in c:\programdata\anaconda3\lib\site-packages (from stable-baselines3[extra
        ]) (8.2.0)
        Requirement already satisfied: tensorboard>=2.2.0 in c:\programdata\anaconda3\lib\site-packages (from stable-base
        lines3[extra]) (2.8.0)
```

Requirement already satisfied: psutil in c:\programdata\anaconda3\lib\site-packages (from stable-baselines3[extra

Importing the SIMPLIFIED controls

]) (5.8.0)

from gym_super_mario_bros.actions import SIMPLE_MOVEMENT

```
Collecting autorom[accept-rom-license]~=0.4.2
  Downloading AutoROM-0.4.2-py3-none-any.whl (16 kB)
Requirement already satisfied: importlib-metadata>=4.10.0 in c:\programdata\anaconda3\lib\site-packages (from ale
-py\sim=0.7.4->stable-baselines3[extra]) (4.11.3)
Collecting importlib-resources
  Downloading importlib resources-5.7.1-py3-none-any.whl (28 kB)
Requirement already satisfied: click in c:\programdata\anaconda3\lib\site-packages (from autorom[accept-rom-licen
se] \sim = 0.4.2 - stable-baselines3[extra]) (7.1.2)
Requirement already satisfied: tqdm in c:\programdata\anaconda3\lib\site-packages (from autorom[accept-rom-licens
e] \sim = 0.4.2 - stable-baselines3[extra]) (4.59.0)
Requirement already satisfied: requests in c:\programdata\anaconda3\lib\site-packages (from autorom[accept-rom-li
cense]~=0.4.2->stable-baselines3[extra]) (2.25.1)
Collecting AutoROM.accept-rom-license
  Downloading AutoROM.accept-rom-license-0.4.2.tar.gz (9.8 kB)
  Installing build dependencies: started
  Installing build dependencies: finished with status 'done'
  Getting requirements to build wheel: started
 Getting requirements to build wheel: finished with status 'done'
    Preparing wheel metadata: started
    Preparing wheel metadata: finished with status 'done'
Requirement already satisfied: zipp>=0.5 in c:\programdata\anaconda3\lib\site-packages (from importlib-metadata>=
4.10.0->ale-py~=0.7.4->stable-baselines3[extra]) (3.4.1)
Requirement already satisfied: google-auth-oauthlib<0.5,>=0.4.1 in c:\programdata\anaconda3\lib\site-packages (fr
om tensorboard>=2.2.0->stable-baselines3[extra]) (0.4.6)
Requirement already satisfied: absl-py>=0.4 in c:\programdata\anaconda3\lib\site-packages (from tensorboard>=2.2.
0->stable-baselines3[extra]) (1.0.0)
Requirement already satisfied: wheel>=0.26 in c:\programdata\anaconda3\lib\site-packages (from tensorboard>=2.2.0
->stable-baselines3[extra]) (0.36.2)
Requirement already satisfied: google-auth<3,>=1.6.3 in c:\programdata\anaconda3\lib\site-packages (from tensorbo
ard>=2.2.0->stable-baselines3[extra]) (2.6.6)
Requirement already satisfied: tensorboard-plugin-wit>=1.6.0 in c:\programdata\anaconda3\lib\site-packages (from
tensorboard>=2.2.0->stable-baselines3[extra]) (1.8.1)
Requirement already satisfied: protobuf>=3.6.0 in c:\programdata\anaconda3\lib\site-packages (from tensorboard>=2
.2.0->stable-baselines3[extra]) (3.20.1)
Requirement already satisfied: grpcio>=1.24.3 in c:\programdata\anaconda3\lib\site-packages (from tensorboard>=2.
2.0->stable-baselines3[extra]) (1.46.1)
Requirement already satisfied: setuptools>=41.0.0 in c:\programdata\anaconda3\lib\site-packages (from tensorboard
>=2.2.0->stable-baselines3[extra]) (52.0.0.post20210125)
Requirement already satisfied: markdown>=2.6.8 in c:\programdata\anaconda3\lib\site-packages (from tensorboard>=2
.2.0->stable-baselines3[extra]) (3.3.7)
Requirement already satisfied: werkzeug>=0.11.15 in c:\programdata\anaconda3\lib\site-packages (from tensorboard>
=2.2.0->stable-baselines3[extra]) (1.0.1)
Requirement already satisfied: tensorboard-data-server<0.7.0,>=0.6.0 in c:\programdata\anaconda3\lib\site-package
s (from tensorboard>=2.2.0->stable-baselines3[extra]) (0.6.1)
Requirement already satisfied: six in c:\programdata\anaconda3\lib\site-packages (from absl-py>=0.4->tensorboard>
=2.2.0->stable-baselines3[extra]) (1.15.0)
Requirement already satisfied: cachetools<6.0,>=2.0.0 in c:\programdata\anaconda3\lib\site-packages (from google-
auth<3,>=1.6.3->tensorboard>=2.2.0->stable-baselines3[extra]) (5.0.0)
Requirement already satisfied: pyasn1-modules>=0.2.1 in c:\programdata\anaconda3\lib\site-packages (from google-a
uth<3,>=1.6.3->tensorboard>=2.2.0->stable-baselines3[extra]) (0.2.8)
Requirement already satisfied: rsa<5,>=3.1.4 in c:\programdata\anaconda3\lib\site-packages (from google-auth<3,>=
1.6.3->tensorboard>=2.2.0->stable-baselines3[extra]) (4.8)
Requirement already satisfied: requests-oauthlib>=0.7.0 in c:\programdata\anaconda3\lib\site-packages (from googl
e-auth-oauthlib < 0.5, >= 0.4.1-> tensorboard >= 2.2.0-> stable-baselines3[extra]) (1.3.1)
Requirement already satisfied: pyasn1<0.5.0,>=0.4.6 in c:\programdata\anaconda3\lib\site-packages (from pyasn1-mo
dules >= 0.2.1 - scale = 0.4.8
Requirement already satisfied: idna<3,>=2.5 in c:\programdata\anaconda3\lib\site-packages (from requests->autorom
[accept-rom-license]~=0.4.2->stable-baselines3[extra]) (2.10)
Requirement already satisfied: urllib3<1.27,>=1.21.1 in c:\programdata\anaconda3\lib\site-packages (from requests
->autorom[accept-rom-license]~=0.4.2->stable-baselines3[extra]) (1.26.4)
Requirement already satisfied: chardet<5,>=3.0.2 in c:\programdata\anaconda3\lib\site-packages (from requests->au
torom[accept-rom-license] \sim = 0.4.2-stable-baselines3[extra]) (4.0.0)
Requirement already satisfied: certifi>=2017.4.17 in c:\programdata\anaconda3\lib\site-packages (from requests->a
utorom[accept-rom-license]~=0.4.2->stable-baselines3[extra]) (2020.12.5)
Requirement already satisfied: oauthlib>=3.0.0 in c:\programdata\anaconda3\lib\site-packages (from requests-oauth
lib >= 0.7.0 - scoole-auth-oauthlib < 0.5, >= 0.4.1 - scorboard >= 2.2.0 - stable-baselines 3 [extra]) (3.2.0)
Requirement already satisfied: typing-extensions in c:\programdata\anaconda3\lib\site-packages (from torch>=1.8.1
->stable-baselines3[extra]) (3.7.4.3)
Requirement already satisfied: python-dateutil>=2.1 in c:\programdata\anaconda3\lib\site-packages (from matplotli
b->stable-baselines3[extra]) (2.8.1)
Requirement already satisfied: pyparsing!=2.0.4,!=2.1.2,!=2.1.6,>=2.0.3 in c:\programdata\anaconda3\lib\site-pack
ages (from matplotlib->stable-baselines3[extra]) (2.4.7)
Requirement already satisfied: cycler>=0.10 in c:\programdata\anaconda3\lib\site-packages (from matplotlib->stabl
e-baselines3[extra]) (0.10.0)
Requirement already satisfied: kiwisolver>=1.0.1 in c:\programdata\anaconda3\lib\site-packages (from matplotlib->
stable-baselines3[extra]) (1.3.1)
Requirement already satisfied: pytz>=2017.3 in c:\programdata\anaconda3\lib\site-packages (from pandas->stable-ba
selines3[extra]) (2021.1)
Building wheels for collected packages: gym, AutoROM.accept-rom-license
  Building wheel for gym (setup.py): started
  Building wheel for gym (setup.py): finished with status 'done'
  Created wheel for gym: filename=gym-0.21.0-py3-none-any.whl size=1616826 sha256=a8af3c5fd2257b7b339f7a8a7b8438b
9b3727e9f4e9f1c2e8b71dd9290c7308c
```

```
Stored in directory: c:\users\computing\appdata\local\pip\cache\wheels\27\6d\b3\a3a6e10704795c9b9000f1ab2dc480d
        fe7bed42f5972806e73
          Building wheel for AutoROM.accept-rom-license (PEP 517): started
          Building wheel for AutoROM.accept-rom-license (PEP 517): finished with status 'done'
          Created wheel for AutoROM.accept-rom-license: filename=AutoROM.accept rom license-0.4.2-py3-none-any.whl size=4
        46447 sha256=15c7594474269e5573dd2ca4a2990254874cecd00c7d40f1465c47a1056b0bbd
          Stored in directory: c:\users\computing\appdata\local\pip\cache\wheels\51\08\c5\28b973078691a3f8baf99fcaec1ed8f
        0e05ef6e54d2390212c
        Successfully built gym AutoROM.accept-rom-license
        Installing collected packages: importlib-resources, gym, AutoROM.accept-rom-license, autorom, stable-baselines3,
        opency-python, ale-py
          Attempting uninstall: gym
            Found existing installation: gym 0.23.1
            Uninstalling gym-0.23.1:
              Successfully uninstalled gym-0.23.1
        Successfully installed AutoROM.accept-rom-license-0.4.2 ale-py-0.7.5 autorom-0.4.2 gym-0.21.0 importlib-resources
        -5.7.1 opency-python-4.5.5.64 stable-baselines3-1.5.0
In [7]:
         # Importing the Frame Stacker Wrapper and GrayScaling Wrapper
         from gym.wrappers import GrayScaleObservation
         # Importing the Vectorization Wrappers
         from stable_baselines3.common.vec_env import VecFrameStack, DummyVecEnv
         # Importing the Matplotlib to show the impact of frame stacking
         from matplotlib import pyplot as plt
       Train the Reinforcement Learning model
In [8]:
         # Import os for file path management
         import os
         # Import PPO for algos
         from stable baselines3 import PPO
         # Import Base Callback for saving models
         from stable_baselines3.common.callbacks import BaseCallback
        C:\ProgramData\Anaconda3\lib\site-packages\ipykernel\ipkernel.py:287: DeprecationWarning: `should run async` will
        not call `transform cell` automatically in the future. Please pass the result to `transformed cell` argument and
        any exception that happen during thetransform in `preprocessing_exc_tuple` in IPython 7.17 and above.
        and should_run_async(code)
         class TrainAndLoggingCallback(BaseCallback):
                  init (self, check freq, save path, verbose=1):
                 super(TrainAndLoggingCallback, self).__init__(verbose)
                 self.check_freq = check_freq
                 self.save path = save path
             def init callback(self):
                 if self.save_path is not None:
                     os.makedirs(self.save_path, exist_ok=True)
             def _on_step(self):
                 if self.n calls % self.check freq == 0:
```

```
In [9]:
                     model path = os.path.join(self.save path, 'best model {}'.format(self.n calls))
                     self.model.save(model_path)
                 return True
```

```
In [10]:
          CHECKPOINT DIRECTORY = './training/'
          LOG DIRECTORY = './logs/'
In [11]:
          # Setup the model saving callback
          callback = TrainAndLoggingCallback(check_freq=10000, save_path=CHECKP0INT_DIRECTORY)
In [12]:
          # AI model started
          model = PPO('CnnPolicy', env, verbose=1, tensorboard_log=LOG_DIRECTORY, learning_rate=0.000001,
                      n steps=512)
```

Using cuda device Wrapping the env with a `Monitor` wrapper Wrapping the env in a DummyVecEnv. Wrapping the env in a VecTransposeImage.

Logging to ./logs/PPO_1

 $\verb|C:\Pr| cost = 0.05 | cost =$ red in ubyte_scalars

return (self.ram[0x86] - self.ram[0x071c]) % 256

time/		
fps	65	
iterations	1	
time_elapsed	7	
<pre> total_timesteps</pre>	512	

time/	
fps	83
iterations	2
time_elapsed	12
<pre>total_timesteps</pre>	1024
train/	
approx_kl	5.9020356e-05
clip_fraction	0
clip_range	0.2
entropy_loss	-1.95
<pre> explained_variance</pre>	-0.0101
learning_rate	1e-06
loss	131
n_updates	10
<pre>policy_gradient_loss</pre>	-0.000465
value_loss	373

time/	1	
fps	93	
iterations	3	
time_elapsed	16	
<pre> total_timesteps</pre>	1536	
train/		
approx_kl	6.171537e-05	
clip_fraction	0	
clip_range	0.2	
entropy_loss	-1.95	
<pre> explained_variance</pre>	0.0169	
<pre> learning_rate</pre>	1e-06	
loss	0.139	
n_updates	20	
<pre>policy_gradient_loss</pre>	-0.000678	
value_loss	2.21	

time/	
fps	98
iterations	4
time_elapsed	20
<pre>total_timesteps</pre>	2048
train/	
approx_kl	2.637785e-05
clip_fraction	0
clip_range	0.2
entropy_loss	-1.95
<pre> explained_variance</pre>	-0.000558
learning_rate	1e-06
loss	0.107
n_updates	30
<pre>policy_gradient_loss</pre>	-0.000396
value_loss	0.943

time/	1
fps	102
iterations	5
time_elapsed	24
<pre> total_timesteps</pre>	2560
train/	
approx_kl	8.875737e-06
<pre> clip_fraction</pre>	0
clip_range	0.2
entropy_loss	-1.95
<pre> explained_variance</pre>	0.0403
learning_rate	1e-06

loss	0.531
<pre> n_updates policy_gradient_loss</pre>	40 _0_00131
value loss	1.4
1 14146_1000	
time/	
fps	106
iterations	6 28
<pre> time_elapsed total timesteps</pre>	3072
train/	
approx_kl	4.636124e-06
clip_fraction	0
clip_range	0.2
<pre> entropy_loss explained variance</pre>	-1.95 0.0424
learning rate	0.0424 1e-06
l loss	0.0738
n_updates	50
1 , ,_3 _	1.57e-05
value_loss	0.523
time/	
fps	107
iterations	7
time_elapsed	33
total_timesteps	3584
train/	
approx_kl clip_fraction	2.3629982e-06 0
clip_rraction	0.2
entropy_loss	-1.95
<pre> explained_variance</pre>	0.0307
learning_rate	1e-06
loss n_updates	0.0649 60
	7.52e-06
value loss	0.349
1.15.7	
time/	
fps iterations	8
time elapsed	37
<pre> total_timesteps</pre>	4096
train/	i i
train/ approx_kl	 1.2195087e-05
train/ approx_kl clip_fraction	 1.2195087e-05 0
train/ approx_kl	 1.2195087e-05
train/ approx_kl clip_fraction clip_range entropy_loss	1.2195087e-05 0
train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate	1.2195087e-05 0 0.2 -1.95 -0.0735 1e-06
train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate	1.2195087e-05 0
train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates	1.2195087e-05 0 0.2 -1.95 -0.0735 1e-06 0.106 70
train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss	1.2195087e-05 0
train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss	1.2195087e-05 0
train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss	1.2195087e-05 0
train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss	1.2195087e-05 0
train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss time/ fps	1.2195087e-05 0
train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss time/ fps iterations	1.2195087e-05 0
train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss time/ fps	1.2195087e-05 0
train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss time/ fps iterations time_elapsed	1.2195087e-05 0
train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss time/ fps iterations time_elapsed total_timesteps train/ approx_kl	1.2195087e-05 0
train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction	1.2195087e-05 0
train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range	1.2195087e-05 0
train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss	1.2195087e-05 0
train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss	1.2195087e-05 0
train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate	1.2195087e-05 0
train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n updates	1.2195087e-05 0
train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss	1.2195087e-05 0
train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n updates	1.2195087e-05 0
train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss	1.2195087e-05 0
train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss	1.2195087e-05 0
train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss	1.2195087e-05 0
train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss trime/ time/ loss n_updates policy_gradient_loss value_loss time/ fps iterations	1.2195087e-05 0
train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss	1.2195087e-05 0

```
train/
                          1.3748417e-05
    approx kl
    clip fraction
                         | 0
                         0.2
    clip_range
    entropy_loss
                         | -1.95
    explained_variance | -0.00212
    learning_rate | 1e-06
                          0.106
                  90
    n updates
    policy_gradient_loss | -0.000241
    value_loss | 0.281
 time/
    fps
                         | 112
    iterations | 112
time_elapsed | 49
total_timesteps | 5632
 train/
                        9.9177705e-06
0
    approx_kl
    clip_fraction
    clip_range | 0.2
entropy_loss | -1.95
explained_variance | 0.0257
                        | 1e-06
| 0.145
    learning_rate
    loss
    n updates
                         | 100
    policy_gradient_loss | -0.00012
    value_loss | 0.285
l time/
                          | 113
    iterations | 12
time_elapsed | 54
total_timesteps | 6144
                       2.2146152e-05
| 0
| 0.2
    approx_kl
    clip_fraction
    clip_range
entropy_loss
                        -1.95
    explained_variance | 0.0207
    learning_rate | 1e-06
loss | 0.0732
n_updates | 110
    policy_gradient_loss | -0.00027
    value_loss | 0.172
| time/
                          | 113
    iterations | 13
time_elapsed | 58
total_timesteps | 6656
                       2.1089683e-05
0
0.2
 train/
    approx kl
    clip_fraction
    clip_range
entropy_loss
                         | -1.94
    explained variance | 0.0356
    learning_rate | 1e-06
                          0.139
    loss
                 120
    n updates
    policy gradient loss | -0.000284
    value_loss | 0.224
| time/
                         | 114
    fps
                       | 14
| 62
| 7168
    iterations
    time_elapsed
    total_timesteps
 train/
                        | 7.048459e-05
    approx kl
                         0
    clip_fraction
    clip range
                        0.2
    entropy_loss
                         | -1.94
    explained_variance | 0.0404
    learning_rate
                          | 1e-06
    loss
                          0.143
                          | 130
    n updates
    policy_gradient_loss | -0.00102
    value_loss
                          0.282
```

```
| 114
    fps
                      | 15
| 67
| 7680
    iterations
    time_elapsed
    total_timesteps
 train/
    approx kl
                          | 1.7669285e-05
    clip_fraction
                         | 0.2
| -1.94
    clip_range
    entropy_loss
    explained variance | 0.091
    learning_rate | 1e-06
                           0.0852
    loss
                          140
    n_updates
    policy gradient loss | -0.00019
    value loss | 0.159
| time/
                           | 114
    time_elapsed | 71
total_timesteps | 8192
ain/
 train/
                         | 1.1015218e-05
| 0
    approx kl
    clip_fraction
    clip_range
                         0.2
    entropy_loss | -1.94
explained_variance | -0.028
learning_rate
    explained_...
learning_rate | ie-oo | 0.114
                         | 150
    n updates
    policy_gradient_loss | -0.000159
    value_loss | 0.189
time/
                          | 114
    iterations | 17
time_elapsed | 75
total_timesteps | 870
                          | 8704
 train/
                         | 4.2646774e-05
    approx kl
                         | 0
    clip_fraction
                         0.2
    clip_range
entropy_loss
    explained_variance | 0.0415
    learning_rate | 1e-06
    loss
                           | 138
                           | 160
    n updates
    policy_gradient_loss | -0.00014
                 | 373
    value loss
| time/
    fps | 115
iterations | 18
time_elapsed | 80
...1 timesteps | 9216
 train/
                        .
| 8.540112e-06
| 0
    approx kl
    clip fraction
                         | 0.2
    clip range
    entropy_loss | -1.94
explained_variance | 0.0208
    learning_rate
                          | 1e-06
    loss
                           | 75.5
    n updates
                          | 170
    policy_gradient_loss | 0.000141
| time/
                        | 19
| 84
| 9728
    iterations
    time_elapsed
    total_timesteps
                          | 3.5932753e-05
    approx_kl
    clip_fraction
                           | 0
    clip_range
                           0.2
```

entropy_loss	-1.94
explained_variance	0.0914
learning_rate	1e-06
loss	0.167
n_updates	180
policy_gradient_loss	·
value_loss	1.02
time/	114
fps iterations	20
time elapsed	89 I
total timesteps	10240
train/	1
approx kl	4.1666906e-05
clip_fraction	0
clip_range	0.2
entropy_loss	-1.94
explained_variance	-0.23
learning_rate	1e-06
loss	0.172
<pre>n_updates policy_gradient_loss </pre>	190
value loss	0.861
vacue_coss	0.001
time/	114
fps iterations	114 21
time elapsed	93
total timesteps	10752
train/	1
approx kl	4.8173824e-05
clip_fraction	0
clip_range	0.2
entropy_loss	-1.94
–	0.0228
learning_rate	1e-06
loss	0.414
n_updates	200
policy_gradient_loss	-0.00067 1.11
value_loss	1.11
time/	
fps	115
iterations	22
time_elapsed	97
total_timesteps	11264
train/ approx kl	1.9937404e-05
clip fraction	0
clip_rraction	0.2
entropy_loss	-1.94
explained variance	0.21
learning rate	1e-06
loss	0.166
n_updates	210
<pre>policy_gradient_loss </pre>	
1	0.572
time/	
fps	115
iterations	23
time_elapsed	101
total timesteps	11776
	j
train/	
train/ approx_kl	1.1628261e-05
train/ approx_kl clip_fraction	0
train/ approx_kl clip_fraction clip_range	0 0.2
train/	0 0.2 -1.94
train/	0 0.2 -1.94 0.0311
train/	0 0.2 -1.94 0.0311 1e-06
train/	0 0.2 -1.94 0.0311 1e-06 0.222
train/	0 0.2 1.94 0.0311 1e-06 0.222 220
<pre> train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss </pre>	0 0.2 1.94 0.0311 1e-06 0.222 220
<pre> train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss </pre>	0 0.2 1.94 0.0311 1e-06 0.222 220 -0.000115
<pre> train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss </pre>	0 0.2 1.94 0.0311 1e-06 0.222 220 -0.000115
<pre> train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss </pre>	0 0.2 1.94 0.0311 1e-06 0.222 220 -0.000115

iterations	24
<pre> time_elapsed total_timesteps</pre>	106 12288
train/	
approx_kl clip_fraction	1.1121971e-05 0
clip_range	0.2 -1.94
<pre> entropy_loss explained variance</pre>	-1.94
learning_rate	1e-06
loss n updates	0.153 230
policy_gradient_loss	
value_loss	0.357
l +imo/	
time/ fps	
iterations	25
<pre> time_elapsed total timesteps</pre>	110 12800
train/	i
<pre> approx_kl clip_fraction</pre>	2.144149e-05 0
clip_range	0.2
<pre> entropy_loss explained variance</pre>	-1.94 0.0155
learning_rate	1e-06
loss	0.11 240
<pre> n_updates policy_gradient_loss</pre>	
value_loss	0.283
time/ fps	
iterations	26
time_elapsed	114 13312
<pre> total_timesteps train/</pre>	15512
approx_kl	7.229508e-06
<pre> clip_fraction clip range</pre>	0 0.2
entropy_loss	-1.94
<pre> explained_variance learning rate</pre>	-0.00541 1e-06
loss	0.128
<pre> n_updates policy_gradient_loss</pre>	250 -5.21e-05
value_loss	0.274
time/	
fps iterations	116 27
time_elapsed	118
<pre> total_timesteps train/</pre>	13824
approx_kl	6.608397e-05
<pre> clip_fraction clip_range</pre>	0 0.2
entropy_loss	-1.94
<pre> explained_variance learning rate</pre>	0.0134 1e-06
• -=	0.131
<pre> n_updates policy_gradient_loss</pre>	260
value_loss	0.315
time/	l l
fps iterations	116 28
time_elapsed	122
<pre> total_timesteps train/</pre>	14336
approx_kl	
clip_fraction	0
<pre> clip_range entropy_loss</pre>	0.2 -1.94
<pre> explained_variance</pre>	-0.0324
<pre> learning_rate loss</pre>	1e-06 0.0975
1	

n_updates	270
<pre>policy_gradient_loss value loss</pre>	-0.00014/
time/	
fps iterations	116
time elapsed	127
total_timesteps	14848
train/	
approx_kl	4.0857238e-05 0
<pre> clip_fraction clip_range</pre>	0.2
entropy_loss	-1.94
explained_variance	-0.000691
learning_rate	1e-06
loss n updates	0.0546 280
policy_gradient_loss	-0.000371
value_loss	0.144
time/	
fps	116
iterations	30
time_elapsed	131
total_timesteps	15360
train/ approx kl	 0.00011826353
clip_fraction	0.00011020333
clip_range	0.2
entropy_loss	-1.94
<pre> explained_variance learning rate</pre>	0.0408 1e-06
tearning_rate loss	0.0983
n_updates	290
policy_gradient_loss	-0.00115
value_loss	0.294
time/	
fps	116
<pre> iterations time_elapsed</pre>	31 135
total_timesteps	15872
train/	
approx_kl	5.3987023e-05
<pre> clip_fraction clip_range </pre>	0 0.2
entropy_loss	-1.94
explained_variance	-0.027
learning_rate	le-06
loss	0.0401 300
<pre> n_updates policy_gradient_loss </pre>	
value_loss	0.107
time/	
fps	
iterations	32
time_elapsed	140
<pre> total_timesteps train/</pre>	16384
approx kl	
clip_fraction	0
clip_range	0.2
entropy_loss	-1.94
<pre> explained_variance learning_rate</pre>	-0.00639
loss	0.0602
n_updates	310
	-0.000368
value_loss	0.159
time/	Į I
fps	116
<pre> iterations time elapsed</pre>	33 144
total_timesteps	16896
train/	i i

explained_variance learning_rate loss n_updates	0.000106889405 0 0.2 -1.94 0.0735 1e-06 114 320 -0.00028 340
time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance	117
value_loss	1e-06 43
time/ fps iterations time_elapsed total_timesteps train/ approx_kl	117 35 152 17920 1.9532512e-05
<pre> clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss</pre>	0 0.2 -1.94 0.573 1e-06 0.103 340 0.000119
value_loss time/ fps	0.994
iterations time_elapsed total_timesteps train/ approx_kl clip_fraction	36 157 18432 2.628949e-05 0
clip_range entropy_loss explained_variance learning_rate loss n_updates	0.2 -1.94 -0.0542 1e-06 0.0917 350 -9.94e-05 0.903
time/ fps iterations	117
time_elapsed total_timesteps train/ approx_kl	161
clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss	0 0.2 -1.94 0.278 1e-06 0.099 360 -0.000259 0.612

time/	1
fps	117
iterations	38
time elapsed	165
total_timesteps	19456
train/	
approx_kl	1.475832e-05
clip_fraction	0
clip_range	0.2
entropy_loss	-1.94
explained_variance	0.19
learning_rate	1e-06
loss	0.0542 370
<pre> n_updates policy_gradient_loss</pre>	-2.92e-05
value loss	0.483
1 14440_1000	
time/	
fps	117
iterations	39
time_elapsed	169
<pre> total_timesteps</pre>	19968
train/	
approx_kl	3.947213e-05
clip_fraction	0
clip_range	0.2
entropy_loss	-1.94
explained_variance	-0.0174
learning_rate	1e-06
loss	0.0743 380
<pre> n_updates policy_gradient_loss</pre>	-0.000357
value_loss	0.339
vatue_toss	
time/	
fps	117
iterations	40
time_elapsed	174
<pre> total_timesteps</pre>	20480
train/	
approx_kl	9.70962e-06
clip_fraction	0
clip_range	0.2
entropy_loss	-1.94
explained_variance	0.144
<pre> learning_rate loss</pre>	1e-06 0.078
n updates	390
· - ·	-6.75e-05
	0.277
1 14446_4655	
time/	
fps	117
iterations	41
time_elapsed	178
total_timesteps	20992
train/	
approx_kl clip_fraction	8.022576e-05 0
clip_rraction clip range	0.2
entropy_loss	-1.94
explained variance	0.105
• • •	1e-06
loss	0.0947
n_updates	400
policy_gradient_loss	-0.000649
	0.269
1 + /	
time/	
• •	117
<pre> iterations time elapsed</pre>	42 182
total_timesteps	'
l corac_cimeocebo	1 21504
train/	21504
train/ approx kl	21504 5.582196e-05
approx_kl	i i
•	 5.582196e-05
approx_kl clip_fraction	 5.582196e-05 0

```
explained variance | 0.00753
   learning_rate
                      | 1e-06
                      0.0984
   loss
   n_updates
                      | 410
   policy_gradient_loss | -0.000463
              | 0.218
   value loss
                       117
                    | 43
| 186
   iterations
   time_elapsed
   total_timesteps
                      | 22016
train/
   approx kl
                      7.654866e-05
   clip fraction
   clip range
                      0.2
                      | -1.94
   entropy_loss
   explained_variance | 0.0765
                      | 1e-06
   learning_rate
                      0.0992
   loss
   n_updates
                      | 420
   policy_gradient_loss | -0.000695
   value_loss
                      0.247
time/
  fps
                       117
   iterations
                      | 44
                    | 191
| 22528
   time_elapsed
   total timesteps
train/
   approx_kl
                      | 9.462761e-05
   clip_fraction
                     | 0
   clip range
                     | 0.2
                      | -1.93
   entropy_loss
   explained variance | 0.494
                    | 1e-06
   learning_rate
   loss
                      | 0.0901
   n_updates
                      | 430
   policy_gradient_loss | -0.000907
   value_loss | 0.202
  fps
                      | 118
                      | 45
   iterations
   time_elapsed
                    | 195
| 23040
   total_timesteps
train/
                      | 0.00010588241
   approx_kl
   clip_fraction
   clip_range
                      | 0.2
                      | -1.93
   entropy_loss
   explained_variance | 0.0208
                      l 1e-06
   learning_rate
                      0.088
   loss
   n_updates
                      | 440
   policy_gradient_loss | -0.000859
                  | 0.177
   value loss
time/
                      | 118
   iterations
                     | 46
   time_elapsed
   total_timesteps
                      | 23552
train/
                      | 3.5663135e-05
   approx_kl
   clip_fraction
   clip_range
                      0.2
   entropy_loss
                      | -1.93
   explained variance | 0.0891
   learning rate
                      l 1e-06
                      0.0874
   loss
   n_updates
                      | 450
   policy_gradient_loss | -0.000288
                      | 2.41e+04
   ep len mean
                      | 402
   ep_rew_mean
```

```
time/
                        118
   fps
   iterations
                        47
                        203
   time_elapsed
                       24064
   total_timesteps
                        6.05284e-05
   approx kl
   clip_fraction
   clip_range
                       0.2
   entropy_loss
                       | -1.93
   explained_variance | -0.00701
   learning_rate
                       | 1e-06
                       0.0534
   loss
   n_updates
                       | 460
   policy_gradient_loss | -0.00044
   value_loss
                       0.115
rollout/
   ep_len_mean
                        2.41e+04
   ep_rew_mean
time/
                       | 118
  fps
   iterations
                       | 48
                      | 207
   time elapsed
   total_timesteps
                      1 24576
train/
                       | 8.796807e-06
  approx_kl
   clip fraction
                      0.2
   clip_range
   entropy_loss
                      | -1.93
   explained_variance | 0.00181
   learning_rate
                       | 1e-06
   loss
                       1 6.65
   n updates
                       | 470
   policy_gradient_loss | -0.000176
   value loss
                       | 2.41e+04
   ep_len_mean
  ep_rew_mean
                       | 402
time/
  fps
                       i 118
   iterations
                      | 49
                      | 211
   time elapsed
   total_timesteps
                      | 25088
train/
                      0.00017270737
   approx_kl
   clip_fraction
                      0.2
   clip_range
                       | -1.93
   entropy_loss
   explained_variance | -0.0142
   learning_rate
                      | 1e-06
                       | 161
   loss
   n updates
   policy_gradient_loss | -0.000491
   value loss
                       | 516
rollout/
                      2.41e+04
   ep len mean
   ep rew mean
                       1 402
time/
                       | 118
  fps
   iterations
                      | 50
                       | 216
   time_elapsed
   {\tt total\_timesteps}
                       | 25600
train/
   approx kl
                       | 6.466522e-06
   clip_fraction
                      0.2
   clip range
                       | -1.93
   entropy_loss
   explained variance
                      0.378
                       l 1e-06
   learning_rate
   loss
                       2.57
                       | 490
   n updates
   policy gradient loss | -1.01e-05
   value_loss
rollout/
                       | 2.41e+04
  ep_len_mean
```

```
ep rew mean
                       | 402
 time/
                         118
    fps
                       | 51
    iterations
                      | 220
    time_elapsed
    total_timesteps
                      | 26112
 train/
                       9.7234384e-05
    approx_kl
    clip_fraction
    clip_range
entropy_loss
                      | 0.2
                       | -1.93
    explained_variance | -0.0425
                       | 1e-06
    learning_rate
                       0.0528
    loss
    n updates
                       500
    policy_gradient_loss | -0.000734
    value loss
 rollout/
    ep len mean
                       | 2.41e+04
    ep_rew_mean
                       | 402
 time/
                       118
   fps
    iterations
                      | 52
                     224
    time_elapsed
    total timesteps
                      | 26624
 train/
    approx kl
                       9.72749e-05
    clip_fraction
    clip_range
entropy_loss
                      0.2
                      -1.93
    explained variance | -0.0547
    learning_rate | 1e-06
                       0.06
    n_updates
                       510
    policy_gradient_loss | -0.000694
               | 0.35
    value_loss
 rollout/
                      | 2.41e+04
    ep_len_mean
    ep rew mean
                       | 402
 time/
   fps
                       | 118
                      | 53
    iterations
                     | 228
| 27136
    time_elapsed
    total timesteps
 train/
                       | 8.3197374e-05
    approx_kl
    clip_fraction
                      0.2
    clip range
                      | -1.93
    entropy_loss
    explained_variance | 0.202
                  | 1e-06
    learning_rate
                       0.0725
                      | 520
    n_updates
    policy_gradient_loss | -0.000504
    value_loss | 0.352
 rollout/
                       | 2.41e+04
    ep len mean
    ep rew mean
 time/
   fps
                       | 118
    iterations
                       | 54
    time elapsed
                     | 232
    total_timesteps
                     27648
 train/
                       3.1648087e-05
    approx_kl
    clip fraction
                      | 0.2
    clip_range
    entropy loss
                       | -1.93
    explained_variance | 0.077
    learning_rate
                       le-06
                       0.0656
    loss
                       | 530
    n_updates
    policy_gradient_loss | -0.000138
    value_loss | 0.3
| rollout/
```

```
ep len mean
                       | 2.41e+04
   ep_rew_mean
                       | 402
time/
  fps
                       | 118
   iterations
                      | 55
   time_elapsed
                      | 236
   total timesteps
                      28160
train/
   approx kl
                      4.808884e-05
   clip_fraction
   clip_range
                      | 0.2
                      | -1.93
   entropy_loss
   explained variance | -0.113
   learning_rate
                      | 1e-06
                      0.0714
   loss
                      540
   n_updates
   policy gradient loss | -0.000424
   value_loss | 0.286
rollout/
                      | 2.41e+04
   ep_len_mean
   ep_rew_mean
time/
                      | 118
  iterations | 56
time_elapsed | 241
total_timesteps | 28672
train/
                      | 1.3691024e-05
   approx_kl
                     | 0
| 0.2
   clip_fraction
   clip_range
   entropy_loss
                     | -1.93
   explained_variance | 0.219
   learning_rate | 1e-06
                      0.0582
   loss
              | 550
   n updates
   policy_gradient_loss | -1.29e-05
   value_loss | 0.237
rollout/
                    2.41e+04
402
   ep len mean
  ep_rew_mean
time/
  fps
                      | 118
   iterations
                      | 57
   time elapsed
                     29184
  total_timesteps
train/
                      | 4.835974e-05
   approx_kl
   clip_fraction
                     | 0
   clip_range
                     | 0.2
   entropy_loss | -1.93
explained_variance | 0.116
                      l 1e-06
   learning_rate
                      | 0.0715
   loss
   n updates
                      | 560
   policy_gradient_loss | -0.000378
   value loss | 0.211
rollout/
  ep_len_mean
                      2.41e+04
                      402
  ep_rew_mean
time/
                      | 118
  fps
   iterations
                      | 58
                     | 249
   time_elapsed
   total_timesteps
                      | 29696
train/
   approx kl
                      | 3.8534636e-05
   clip_fraction
                     | 0
                      0.2
   clip range
                      | -1.93
   entropy_loss
   explained variance | 0.0423
                      | 1e-06
   learning_rate
   loss
                       0.0495
   n updates
                      | 570
   policy_gradient_loss | -0.000385
                 | 0.15
   value_loss
```

```
rollout/
                       2.41e+04
   ep len mean
  ep rew mean
                      | 402
time/
  fps
                      | 118
                      | 59
   iterations
   time elapsed
                       254
                      30208
   total_timesteps
                      | 4.900247e-05
  approx_kl
  clip_fraction
                     0.2
   clip_range
  entropy_loss
                      | -1.93
   explained variance | 0.0404
   learning rate
                      l 1e-06
                      0.0784
  loss
                      | 580
  n updates
   policy_gradient_loss | -0.000404
   value_loss | 0.145
rollout/
                     | 2.41e+04
  ep len mean
  ep_rew_mean
                      1 402
time/
                      | 118
  fps
                     | 60
   iterations
                     | 258
   time elapsed
  total_timesteps
                      30720
train/
   approx_kl
                     | 5.728472e-05
   clip_fraction
                     | 0.2
   clip_range
                     | -1.93
   entropy_loss
   explained variance | -0.194
                      l 1e-06
   learning_rate
                      0.0794
   n_updates
                      | 590
   policy_gradient_loss | -0.00041
   value_loss
                      0.167
rollout/
                      2.41e+04
  ep len mean
   ep rew mean
                      | 402
time/
                      | 118
  fps
  iterations
                     61
  time_elapsed
                    | 262
  total_timesteps
                    | 31232
train/
  approx kl
                      3.0268915e-05
   clip_fraction
  clip_range
                     0.2
   entropy_loss
                      | -1.92
   explained variance | 0.0226
                      | 1e-06
  learning_rate
   loss
                      0.047
   n_updates
                      | 600
   policy_gradient_loss | -0.00027
   value_loss
                      0.112
                     | 2.41e+04
  ep len mean
  ep_rew_mean
time/
  fps
                      | 118
                      | 62
   iterations
   time elapsed
                     | 267
                     | 31744
  total_timesteps
                      | 9.985082e-05
  approx_kl
   clip fraction
   clip range
                      0.2
   entropy loss
                      | -1.92
                     | 7.3e-05
   explained_variance
   learning_rate
                      | 1e-06
                      0.0556
   n_updates
                      | 610
   policy_gradient_loss | -0.000736
   value loss | 0.129
```

```
rollout/
                       2.41e+04
  ep len mean
   ep rew mean
                      1 402
time/
                       118
  fps
   iterations
                       63
   time elapsed
                      | 271
  total_timesteps
                     32256
train/
  approx kl
                      | 0.00029234402
   clip_fraction
                      0.2
  clip range
   entropy_loss
                      | -1.92
   explained variance | 0.0241
                      | 1e-06
   learning_rate
                      0.0396
                      | 620
   n_updates
   policy_gradient_loss | -0.00187
   value_loss | 0.121
rollout/
                        2.41e+04
   ep_len_mean
  ep_rew_mean
time/
                      | 119
                      | 64
  iterations
  time elapsed
                     | 275
                      | 32768
  total_timesteps
                      7.903855e-05
  approx_kl
   clip_fraction
   clip_range
                      0.2
   entropy loss
                      | -1.92
   explained_variance | 0.0466
   learning_rate
                      | 1e-06
                      0.0647
  loss
   n_updates
                      | 630
   policy_gradient_loss | -0.000494
   value_loss
                      0.127
rollout/
   ep len mean
                      | 2.41e+04
  ep_rew_mean
time/
  fps
                      | 119
  iterations
                      | 65
                    | 279
   time_elapsed
   total_timesteps
                      | 33280
train/
                      | 0.00035508315
  approx_kl
   clip_fraction
                      0.2
   clip_range
   entropy loss
                      | -1.92
   explained_variance | 0.186
   learning_rate
                      | 1e-06
   loss
                      1 102
   n updates
                      | 640
   policy_gradient_loss | -0.000689
   value loss
                      | 294
rollout/
                    | 2.41e+04
  ep_len_mean
  ep_rew_mean
                      | 402
time/
```

fps 119 iterations 66 | 283 time_elapsed total_timesteps | 33792 train/ 9.487849e-06 approx kl clip fraction clip range 0.2 | -1.92 entropy_loss explained variance | -0.178 learning_rate | 1e-06 loss 0.145 n_updates I 650 policy_gradient_loss | 7.54e-06 value_loss | 1.09

rollout/ ep_len_mean | 2.41e+04 ep_rew_mean | 402 time/ 1119 fps iterations | 67 time_elapsed total_timesteps 34304 train/ | 3.7698657e-05 approx_kl clip_fraction clip_range 0.2 | -1.92 entropy loss explained_variance | -0.031 learning_rate l 1e-06 0.0886 loss n updates 660 policy_gradient_loss | -0.000195 value loss | 0.484 ep_len_mean | 2.41e+04 ep_rew_mean | 402 time/ | 119 fps iterations 68 | 291 time_elapsed total timesteps | 34816 train/ 6.140012e-05 approx_kl clip_fraction | 0 0.2 clip range | -1.91

entropy_loss explained variance | -0.104 | 1e-06 learning_rate loss | 26 n_updates i 670 policy_gradient_loss | 9.56e-05 value_loss | 83.5

rollout/ 2.41e+04 ep len mean ep_rew_mean | 402 time/ fps | 119 | 69 iterations time_elapsed | 296 total_timesteps | 35328 train/ 7.8473124e-05 approx kl clip_fraction clip range 0.2 entropy_loss | -1.91 explained_variance | 0.476 learning_rate | 1e-06 0.123 loss | 680 n_updates policy_gradient_loss | -0.000277 value_loss | 0.927

rollout/	
ep_len_mean	2.41e+04
ep_rew_mean	402
time/	
fps	119
iterations	70
time elapsed	300
total timesteps	35840
train/	İ
approx kl	0.000101291924
clip fraction	0
clip range	0.2
entropy loss	-1.92
explained variance	-0.123
learning_rate	le-06
loss	0.209
n updates	690
policy_gradient_loss	-0.000301

value_loss	0.928
Vacue_t033	
rollout/	
ep len mean	
ep_rew_mean	402
time/ fps	
iterations	71
time_elapsed	304
<pre> total_timesteps train/</pre>	36352
approx_kl	4.193827e-05
clip_fraction	0
<pre> clip_range entropy_loss</pre>	0.2 -1.92
explained_variance	0.00314
<pre> learning_rate loss</pre>	1e-06 0.131
n updates	700
1 , , , , , _	-9.9e-05
value_loss	0.549
rollout/	
ep_len_mean ep rew mean	2.41e+04 402
time/	402
fps	119
<pre> iterations time elapsed</pre>	72 308
total_timesteps	36864
train/	
approx_kl clip_fraction	6.892835e-06 0
clip_range	0.2
entropy_loss	-1.92
· · · · · · · · · · · · · · · · · · ·	0.243 1e-06
loss	0.5
n_updates	710 -2.77e-06
<pre>policy_gradient_loss value loss</pre>	1.15
rollout/	
ep len mean	2.41e+04
ep_rew_mean	402
time/ fps	
iterations	73
time_elapsed	312
<pre> total_timesteps train/</pre>	37376
approx_kl	3.1243544e-05
clip_fraction	0 0.2
<pre> clip_range entropy_loss</pre>	0.2
explained_variance	0.11
!	1e-06
loss n_updates	0.0752 720
	-0.000161
value_loss	0.452
rollout/	
<pre> ep_len_mean ep rew mean</pre>	2.41e+04 402
time/	
fps	119
<pre> iterations time elapsed</pre>	74 317
total_timesteps	37888
train/	
approx_kl clip_fraction	4.5105233e-05 0
clip range	0.2
<pre> entropy_loss explained variance</pre>	-1.91 -0.00161
explained_variance learning rate	1e-06
loss	0.177
n_updates	730

<pre>policy_gradient_loss value_loss</pre>	-0.000146 0.517
rollout/	1
ep_len_mean	2.41e+04
ep_rew_mean	402
time/	
fps iterations	119 75
time elapsed	321
total_timesteps	38400
train/	
approx_kl	5.2992953e-05
<pre> clip_fraction clip range</pre>	0 0.2
entropy_loss	-1.91
	0.0697
learning_rate	le-06
loss	0.0603
	740
. , ,_, _	-0.000397
vacue_coss	
rollout/	ļ l
ep_len_mean	2.41e+04
ep_rew_mean	402
time/ fps	
iterations	119 76
time elapsed	325
total_timesteps	38912
train/	
approx_kl	1.5947036e-05
clip_fraction	0 0.2
<pre> clip_range entropy_loss</pre>	-1.91
	0.0892
learning_rate	l 1e-06
loss	0.0542
n_updates	750
<pre>policy_gradient_loss value_loss</pre>	4.8e-06 0.21
vacue_coss	
rollout/	
ep_len_mean	2.41e+04
ep_rew_mean	402
time/ fps	
iterations	113 77
time elapsed	329
total_timesteps	39424
train/	
approx_kl	0.00015128625
clip_fraction clip range	0 0.2
ctip_range entropy loss	0.2
explained_variance	-0.0552
learning_rate	l 1e-06
loss	0.0579
n_updates	760
<pre>policy_gradient_loss value_loss</pre>	-0.000954 0.169
vatue_t055	· · · · · · · · · · · · · · · · · · ·
rollout/	l I
ep_len_mean	2.41e+04
ep_rew_mean	402
time/ fps	
ips iterations	119 78
time elapsed	333
total_timesteps	39936
train/	į į
l approx kl	l 2.4801819e-05 l

ain/
approx_kl
clip_fraction
clip_range
entropy_loss
explained_variance
learning_rate
loss

2.4801819e-05

0 0.2 -1.91 -0.102 | 1e-06 | 0.0463

<pre> n_updates policy_gradient_loss </pre>	770 -7 4e-05
value loss	
11+ /	
rollout/ ep_len_mean	
ep_rew_mean	458
time/	į
fps	119
<pre> iterations time elapsed</pre>	79 339
total timesteps	40448
train/	j
approx_kl	5.9606275e-05
<pre> clip_fraction clip_range</pre>	0 0.2
entropy_loss	-1.91
	0.00323
	1e-06
loss n updates	0.0409 780
policy_gradient_loss	
	0.138
rollout/	
ep len mean	2.01e+04
ep_rew_mean	458
time/	
fps iterations	119 80
time elapsed	343
total_timesteps	40960
train/	<u> </u>
approx_kl	0.00026477023 0
<pre> clip_fraction clip_range</pre>	0.2
entropy_loss	-1.91
	0.161
<pre> learning_rate loss</pre>	1e-06 68.1
n updates	790
policy_gradient_loss	9.16e-06
value_loss	188
rollout/	
ep_len_mean	2.01e+04
ep_rew_mean time/	458
fps	119
iterations	81
time_elapsed	347
<pre> total_timesteps train/</pre>	41472
approx_kl	0.00042492198
clip_fraction	0
clip_range	0.2 -1.9
<pre> entropy_loss explained variance</pre>	0.286
learning rate	1e-06
loss	106
n_updates	800
! ' - '=' - !	0.00088 233
vatue_toss	
rollout/ ep_len_mean	
ep rew mean	458
time/	İ
fps	119
iterations time elapsed	82 351
total_timesteps	41984
train/	į
approx_kl	5.7296245e-05
<pre> clip_fraction clip range</pre>	0 0.2
entropy_loss	-1.9
<pre> explained_variance </pre>	•
learning_rate	le-06

```
| 810
  n_updates
  policy_gradient_loss | -0.000105
  value loss
                      0.836
rollout/
  ep_len_mean
                        2.01e+04
  ep_rew_mean
time/
  fps
                        119
  iterations
                        83
  time elapsed
  total_timesteps
                      | 42496
train/
                      | 9.69969e-05
  approx_kl
  clip fraction
                      0.2
  clip_range
  entropy_loss
                      | -1.9
  explained_variance
                     | -0.0303
                      | 1e-06
  learning_rate
                      0.0412
  n updates
  policy_gradient_loss | -0.00056
  value loss
                      0.497
rollout/
                        2.01e+04
  ep len mean
  ep_rew_mean
time/
                      | 119
  fps
  iterations
  time elapsed
                     | 359
  total_timesteps
                      | 43008
train/
  approx kl
                      | 4.488323e-05
                      | 0
  clip_fraction
  clip_range
                      0.2
                      | -1.9
  entropy_loss
  explained_variance | 0.0286
                      | 1e-06
  learning_rate
                      0.0915
  n_updates
                      | 830
  policy_gradient_loss | -6.11e-05
  value_loss | 0.406
                      | 2.01e+04
  ep_len_mean
  ep_rew_mean
                      | 458
time/
  fps
                      | 119
  iterations
                      | 85
  time_elapsed
                      | 363
  total_timesteps
                      | 43520
train/
                      | 6.3301646e-05
  approx kl
  clip_fraction
                      0.2
  clip_range
                      | -1.9
  entropy_loss
  explained variance | 0.239
                      | 1e-06
  learning_rate
  loss
                      | 840
  n_updates
  policy_gradient_loss | -0.00038
  value_loss
                      | 69.1
rollout/
  ep_len_mean
                        2.01e+04
  ep_rew_mean
time/
                        119
  fps
                      | 86
  iterations
  time elapsed
                      44032
  total_timesteps
train/
  approx_kl
                      | 3.336533e-05
  clip_fraction
  clip_range
                      0.2
  entropy loss
                      | -1.9
                     | 0.216
  explained_variance
```

loss

0.0629

learning_rate loss n_updates policy_gradient_loss value_loss	
rollout/	
ep_len_mean	2.01e+04
ep rew mean	458
time/	i i
fps	119
iterations	87
time elapsed	372
total timesteps	44544
train/	i i
approx kl	7.9631456e-05
clip fraction	0
clip range	0.2
entropy_loss	-1.9
	0.0405
learning rate	le-06
loss	0.0558
n updates	860
policy_gradient_loss	-0.000523
value loss	0.42
	'
rollout/	1
ep len mean	2.01e+04
ep rew mean	458
time/	
fps	119
iterations	88
time elapsed	376
total_timesteps	45056
train/	15050
approx kl	9.312411e-06
clip_fraction	0
	0.2
entropy loss	-1.91
_ : .· _ :	0.254
learning rate	l 1e-06
l loss	0.0695
n updates	870
policy_gradient_loss	
	0.398
1	
rollout/	
ep len mean	2.01e+04
ep rew mean	458
time/	i i
fps	i 119
iterations	89
time elapsed	380
total_timesteps	45568
train/	i i
approx kl	0.0001262069
clip_fraction	i 0
clip_range	0.2
entropy_loss	-1.9
	-0.0183
learning_rate	le-06
loss	0.0938
n updates	880
policy_gradient_loss	-0.000819
	0.382
	'
rollout/	
ep len mean	2.01e+04
ep rew mean	458
time/	i
fps	119
iterations	90
time_elapsed	384
total timesteps	46080
train/	i i
approx kl	0.00014135998
clip fraction	0.00014133330
clip_rraction	0.2
entropy loss	-1.9

```
explained variance
  learning_rate
                      | 1e-06
                      0.0383
  loss
                      | 890
  n_updates
  policy_gradient_loss | -0.00106
                      0.257
  value loss
                        2.01e+04
  ep_len_mean
  ep_rew_mean
                      | 458
time/
  fps
                      | 119
  iterations
                      | 91
  time elapsed
                      388
  total timesteps
                      | 46592
                      | 1.1963653e-05
  approx_kl
  clip fraction
  clip_range
                      0.2
                      | -1.91
  entropy_loss
  explained_variance | 0.0154
                    | 1e-06
  learning_rate
                      | 0.0937
  n updates
                      | 900
  policy_gradient_loss | 1.97e-05
  value loss | 0.315
rollout/
  ep len mean
                        2.01e+04
                      | 458
  ep_rew_mean
                      | 119
  fps
  iterations
                        92
                      | 393
  time elapsed
  total_timesteps
                      | 47104
train/
  approx_kl
                      | 5.487469e-05
  clip_fraction
  clip_range
                      0.2
                      | -1.91
  entropy_loss
  explained variance | -0.0575
                      l 1e-06
  learning_rate
                      0.0661
  n updates
                      | 910
  policy_gradient_loss | -0.000321
  value loss | 0.21
  ep_len_mean
                      | 2.01e+04
  ep_rew_mean
time/
                      | 119
  fps
  iterations
                    | 397
  time_elapsed
  total_timesteps
                      | 47616
train/
                      7.354689e-05
  approx kl
  clip_fraction
                      | 0
  clip range
                      0.2
  entropy_loss
                      | -1.91
  explained variance | 0.414
  learning_rate
                      | 1e-06
                      0.0504
  loss
  n_updates
                      | 920
  policy_gradient_loss | -0.000417
  value_loss
                      0.189
  ep_len_mean
                      | 2.01e+04
                      458
  ep rew mean
time/
  fps
                      | 119
                      | 94
  iterations
                      | 401
  time elapsed
  total_timesteps
                      I 48128
train/
                      | 0.000102288905
  approx_kl
  clip_fraction
                      | 0
  clip_range
                      0.2
```

| -0.106

```
entropy_loss
                     | -1.91
   explained_variance | 0.189
   learning_rate | 1e-06
                     | 0.0617
   n updates
                     | 930
   policy_gradient_loss | -0.000601
   value_loss | 0.173
  ep len mean
                      | 2.01e+04
  ep_rew_mean
                     | 458
time/
  fps
                      | 119
   iterations
   time_elapsed
                     | 405
  total timesteps
                    | 48640
train/
  approx kl
                      4.9732276e-05
   clip_fraction
   clip range
                     0.2
   entropy_loss
                     | -1.91
   explained_variance | 0.0178
                      l 1e-06
   learning_rate
                      0.0489
                     | 940
   n_updates
   policy gradient loss | -0.000258
   value_loss | 0.148
                     | 2.01e+04
  ep_len_mean
  ep rew mean
                      | 458
time/
  fps
                      | 119
                     | 96
  iterations
   time elapsed
                    409
                     | 49152
  total_timesteps
train/
  approx_kl
                      0.0006643251
   clip_fraction
                    | 0.2
   clip_range
                      | -1.9
   entropy loss
   explained_variance | 0.331
   learning_rate
                     | 1e-06
                      | 148
   loss
   n_updates
                      | 950
   policy_gradient_loss | 0.00158
   value loss
rollout/
                     | 2.01e+04
  ep_len_mean
  ep_rew_mean
                      | 458
time/
                      | 120
   iterations
                    | 97
   time elapsed
                    | 413
  total_timesteps
                      | 49664
train/
                     | 4.2285654e-05
   approx_kl
   clip fraction
   clip range
                     0.2
   entropy loss
                      | -1.9
   explained variance | -0.00375
                      l 1e-06
   learning_rate
                      0.108
   loss
   n updates
   policy_gradient_loss | -0.000183
                      | 1.34
rollout/
                      | 2.01e+04
  ep len mean
  ep rew mean
                      | 458
time/
                      | 119
  fps
                      | 98
   iterations
  time_elapsed
                      | 418
  total_timesteps
                      | 50176
train/
   approx kl
                      | 5.166384e-05
   clip_fraction
```

```
clip_range
                      0.2
   entropy_loss
                      | -1.9
   explained_variance | 0.123
   learning_rate
                      | 1e-06
                      | 0.135
   loss
              970
   n updates
   policy_gradient_loss | -0.000188
   value_loss | 0.546
rollout/
                      | 2.01e+04
   ep_len_mean
  ep rew mean
                      | 458
time/
                      | 119
  fps
   iterations
   time elapsed
  total timesteps
                    50688
train/
                      | 0.00010911282
  approx_kl
   clip_fraction
                     | 0.2
   clip_range
  entropy_loss | -1.9
explained_variance | 0.151
   learning_rate
                     | 1e-06
                     | 0.17
   n updates
                      | 980
   policy_gradient_loss | -0.000644
   value loss | 0.578
rollout/
                      | 2.01e+04
   ep len mean
  ep_rew_mean
                      | 458
time/
                      | 119
  fps
  iterations
                     | 100
                    | 427
| 51200
  time_elapsed
  total_timesteps
                      | 0.00010636577
  approx_kl
  clip_fraction
                     | 0.2
   clip_range
                      | -1.9
   entropy_loss
   explained variance | 0.17
   learning_rate | 1e-06
                      | 0.179
   n updates
   policy_gradient_loss | -0.000687
   value_loss | 0.566
                    2.01e+04
  ep_len_mean
  ep_rew_mean
                      | 458
                      | 119
  | 119 | 101 | 101 | total_timesteps | 5177 | appr
                      | 51712
train/
                      1.6303966e-05
  approx kl
                     0 0.2
   clip fraction
   clip range
                     | -1.9
   entropy_loss
   explained_variance | 0.264
                      | 1e-06
   learning_rate
   loss
                      0.127
                      | 1000
   n_updates
   policy_gradient_loss | -1.44e-05
   value_loss | 0.447
rollout/
                      | 2.01e+04
  ep len mean
  ep_rew_mean
time/
                      | 102
  iterations
   time_elapsed
                      | 52224
  total_timesteps
train/
                      | 4.0674815e-05 |
  approx_kl
```

```
clip_fraction
                      | 0
                      0.2
   clip_range
   entropy_loss
                      | -1.9
   explained_variance | -0.0123
                      l 1e-06
   learning_rate
                      | 0.139
  n_updates | 1010
policy_gradient_loss | -0.00037
   value_loss | 0.362
rollout/
  ep len mean
                      | 2.01e+04
  ep_rew_mean
time/
                      | 119
  fps
  iterations
                     | 439
  time elapsed
  total timesteps
                     | 52736
train/
                      | 7.446518e-05
  approx kl
   clip_fraction
  clip_range
                      0.2
                     | -1.9
   entropy_loss
   explained variance | -0.0263
                    | 1e-06
   learning_rate
                     | 0.132
  n_updates
                      | 1020
  policy_gradient_loss | -0.000528
   value_loss | 0.342
  ep_len_mean
                     | 2.01e+04
  ep_rew_mean
time/
  fps
                      | 119
                     | 104
  iterations
   time_elapsed
                    | 444
| 53248
  total_timesteps
                      | 5.697587e-05
  approx kl
   clip_fraction
                     0.2
   clip range
   entropy loss
                     | -1.9
   explained_variance | 0.00498
   learning_rate | 1e-06
  loss
                      0.104
                      | 1030
   n_updates
   policy_gradient_loss | -0.000369
   value_loss | 0.274
rollout/
                     | 2.01e+04
  ep_len_mean
  ep rew mean
                      | 458
time/
  fps
                      | 119
   iterations
                      | 105
   time elapsed
  total_timesteps
                      | 53760
train/
   approx_kl
                      3.4963014e-05
   clip fraction
                     | 0.2
   clip_range
   entropy_loss
                      | -1.9
   explained_variance | 0.00992
   learning_rate
                      | 1e-06
                      | 0.119
   loss
   n updates
                      | 1040
   policy_gradient_loss | -0.000206
rollout/
  ep len mean
                      2.01e+04
  ep_rew_mean
time/
                      | 119
                      | 106
  iterations
                      | 452
  time_elapsed
   total_timesteps
                      | 54272
train/
```

```
approx kl
                        | 2.7920934e-05
   clip_fraction
                      0.2
   clip_range
entropy_loss
                       | -1.9
   explained_variance | -0.027
   learning_rate | 1e-06
   loss | 0.0917
n_updates | 1050
   policy_gradient_loss | -0.000147
   value_loss | 0.192
rollout/
                     2.01e+04
458
   ep_len_mean
ep_rew_mean
time/
                        | 119
                      | 107
   iterations
   time_elapsed
   total_timesteps
                        | 54784
train/
                      | 9.0466696e-05
   approx_kl
                      0 0.2
   clip_fraction
   clip_range
entropy_loss
                      -1.9
   explained_variance | 0.232
   learning_rate | 1e-06
loss | 0.0688
n_updates | 1060
   policy_gradient_loss | -0.000535
rollout/
   ep len mean
                        | 2.01e+04
   ep_rew_mean
                        | 458
time/
                       | 119
  fps
  iterations | 108
time_elapsed | 460
total_timesteps | 55296
train/
                      0.00014058664
0
   approx kl
   clip_fraction
   clip_range
entropy_loss
                      | 0.2
   entropy_loss | -1.9
explained_variance | -0.0218
   learning_rate | 1e-06 loss | 0.0487
                       | 1070
   n_updates
   policy_gradient_loss | -0.000682
   value_loss | 0.152
rollout/
   ep_len_mean
                      2.01e+04
458
   ep_rew_mean
time/
  fps
                        | 119
                       | 109
   iterations
  time_elapsed | 465
total_timesteps | 55808
train/
                       6.113283e-05
   approx kl
   clip fraction
                      | 0
   clip_range
entropy_loss
                      | 0.2
                        | -1.9
   explained_variance | 0.564
                    | 1e-06
   learning_rate
                | 0.0782
| 1080
   n_updates
   policy_gradient_loss | -0.000358
   value loss | 0.159
rollout/
                     2.01e+04
   ep_len_mean
   ep_rew_mean
time/
                        | 119
                      | 110
   iterations
   time_elapsed
                        | 469
   total_timesteps
                        | 56320
```

```
train/
                      0.00014101283
   approx_kl
   clip fraction
                     | 0
                     0.2
   clip_range
                     | -1.89
   entropy_loss
   explained_variance | 0.0864
   learning_rate | 1e-06
                     0.0544
   n updates
                    | 1090
   policy_gradient_loss | -0.000647
   value_loss | 0.114
rollout/
                      2.01e+04
   ep len mean
                     | 458
  ep rew mean
time/
                      | 119
  fps
   iterations
                     | 111
   time_elapsed
                     | 473
  total_timesteps
                     | 56832
train/
                     0.00022586761
  approx kl
   clip_fraction
   clip range
                     0.2
                     | -1.89
   entropy_loss
   explained_variance | 0.0861
                     | 1e-06
   learning_rate
                     0.051
   loss
  value_loss | 0.13
rollout/
                      | 2.01e+04
  ep_len_mean
  ep_rew_mean
time/
  fps
                     | 119
                     | 112
  iterations
   time_elapsed
                    | 478
  total_timesteps
                    | 57344
train/
                     0.0005821631
  approx kl
   clip_fraction
  clip_range
entropy_loss
                     0.2
                     | -1.88
   explained variance | 0.404
   learning_rate
                     | 1e-06
                      | 169
   loss
   n_updates
                      | 1110
   policy_gradient_loss | -0.000717
   value_loss
  ep_len_mean
ep_rew_mean
                    | 1.92e+04
                     | 622
time/
  fps
                      | 119
                     | 113
   iterations
                    | 482
   time elapsed
  total timesteps
                     57856
train/
                     7.798197e-06
  approx_kl
                     | 0
   clip_fraction
                     0.2
   clip_range
   entropy_loss
                     | -1.88
   explained_variance | -0.112
                    | 1e-06
   learning_rate
   loss
                      0.057
   n updates
                    | 1120
   policy_gradient_loss | 0.000278
   value loss
                      0.984
rollout/
  ep len mean
                     | 1.92e+04
  ep_rew_mean
                      | 622
time/
                     | 119
  fps
   iterations
                      | 114
                      | 486
  time_elapsed
```

total timesteps	58368
train/	i i
approx_kl	0.0008533922
clip_fraction	0.00215
clip_range	0.2
<pre> entropy_loss explained variance</pre>	-1.87 0.389
learning rate	1e-06
loss	197
n updates	1130
policy_gradient_loss	-0.000509
value_loss	441
rollout/	l I
ep len mean	1.92e+04
ep_rew_mean	622
time/	
fps	119
iterations	115
time_elapsed	490
<pre> total_timesteps train/</pre>	58880
approx kl	 5.1210285e-05
clip fraction	0
clip_range	0.2
entropy_loss	-1.87
explained_variance	0.0377
! <u> </u>	1e-06
loss	0.125
1	1140
	-0.000133 3.19
vacue_coss	
rollout/	
ep_len_mean	1.92e+04
ep_rew_mean	622
time/	
fps	120
<pre> iterations time elapsed</pre>	116 494
total_timesteps	59392
train/	
approx_kl	0.00011548796
clip_fraction	0
clip_range	0.2
entropy_loss	-1.87
<pre> explained_variance learning rate</pre>	0.0288 1e-06
loss	0.106
n updates	1150
policy_gradient_loss	
	1.28
L mallacet/	
rollout/	1 020.04
<pre> ep_len_mean ep rew mean</pre>	1.92e+04 622
time/	
fps	120
iterations	117
time_elapsed	499
total_timesteps	59904
train/	
<pre> approx_kl clip_fraction</pre>	6.68359e-05 0
clip_range	0.2
	-1.87
<pre> explained_variance</pre>	0.077
learning_rate	le-06
	0.104
n_updates	1160
<pre>policy_gradient_loss value loss</pre>	-0.000283 0.751
value_tuss	
rollout/	
ep_len_mean	1.92e+04
ep_rew_mean	622
time/	
fps iterations	119 118
I TICI GITTOII2	1 110

```
time elapsed
                      | 504
                      | 60416
   total_timesteps
train/
                      7.9120044e-05
   approx kl
   clip_fraction
                     0.2
   clip_range
                     | -1.87
   entropy_loss
   explained_variance | 0.437
                      l 1e-06
   learning_rate
                      | 36.2
   loss
   n updates
                      | 1170
   policy_gradient_loss | 5.39e-05
   value loss
rollout/
   ep len mean
                      1.92e+04
   ep rew mean
                      | 622
time/
                      | 119
  fps
  iterations
                      | 119
                    | 508
  time_elapsed
  total_timesteps
                    | 60928
train/
  approx kl
                     | 3.303634e-05
   clip_fraction
   clip range
                     | 0.2
                      | -1.87
   entropy_loss
   explained variance | -0.068
                    | 1e-06
  learning_rate
                      | 0.129
   n updates
                      1180
   policy_gradient_loss | -5.04e-05
   value_loss | 0.8
                    | 1.92e+04
  ep_len_mean
  ep_rew_mean
time/
                      | 119
                    | 120
  iterations
                    | 512
   time_elapsed
  total_timesteps
                     | 61440
  approx kl
                     | 5.253649e-05
   clip_fraction
                     0.2
   clip range
   entropy_loss
                    | -1.87
   explained_variance | -0.0352
   learning_rate
                     | 1e-06
                      0.0564
   loss
   n updates
                      | 1190
   policy_gradient_loss | -0.000237
   value_loss | 0.618
rollout/
                     | 1.92e+04
   ep_len_mean
  ep_rew_mean
                     | 622
time/
                      119
  fps
                     | 121
  iterations
   time elapsed
  total timesteps
                    61952
train/
  approx_kl
                     | 4.5707566e-05
   clip_fraction
   clip_range
                     0.2
   entropy_loss
                      | -1.87
   explained_variance | -0.262
   learning_rate
                      | 1e-06
                      0.0977
  loss
                      1200
   n updates
   policy gradient loss | -0.000209
   value loss
                      0.376
  ep len mean
                      | 1.92e+04
  ep_rew_mean
                      | 622
time/
                      | 119
 fps
```

```
iterations
                       | 122
   time_elapsed
                      | 521
   total timesteps
                       62464
train/
                      0.00010157528
   approx kl
   clip_fraction
   clip_range
entropy_loss
                      0.2
                      | -1.87
   explained variance | 0.405
   learning_rate
                      | 1e-06
                       0.0703
   loss
                       | 1210
   n_updates
   policy_gradient_loss | -0.000589
                       0.407
   value loss
  ep_len_mean
ep_rew_mean
                     | 1.92e+04
                      | 622
time/
                       | 119
  fps
                      | 123
   iterations
                     525
62976
   time elapsed
   total_timesteps
                      0.00025190425
   approx_kl
   clip fraction
   clip_range
                      | 0.2
   entropy loss
                      | -1.87
   explained_variance | -0.0547
   learning_rate | 1e-06
                       0.0615
   loss
                      | 1220
   n_updates
   policy_gradient_loss | -0.00117
   value loss | 0.329
rollout/
                     1.92e+04
   ep_len_mean
ep_rew_mean
                      | 622
time/
                      | 119
  fps
                      | 124
   iterations
   time elapsed
                      | 529
   total timesteps
                      | 63488
train/
                      0.00019585586
   approx_kl
   clip fraction
   clip_range
                      0.2
                      | -1.87
   entropy_loss
   explained_variance | -0.166
   learning_rate
                       | 1e-06
   loss
                       0.0464
                       | 1230
   n updates
   policy_gradient_loss | -0.000867
   value loss
rollout/
                       | 1.92e+04
   ep len mean
   ep_rew_mean
                      | 622
time/
                      | 119
  fps
                     | 125
   iterations
   time_elapsed
                     | 533
   total_timesteps
                      64000
train/
   approx kl
                      | 4.942424e-05
   clip_fraction
   clip range
                      0.2
   entropy_loss
                       | -1.87
   explained variance | -0.0902
   learning_rate
                      | 1e-06
                      0.0503
   n_updates
                      | 1240
   policy_gradient_loss | -0.000145
   value loss
                       0.194
                       | 1.92e+04
   ep_len_mean
   ep_rew_mean
                      | 622
time/
```

```
fps
                      | 119
                     | 126
   iterations
   time_elapsed
                     | 537
   total_timesteps
                     | 64512
train/
                     | 0.0001308833
   approx_kl
   clip fraction
  clip_range
entropy_loss
                     0.2
                    | -1.86
   explained_variance | 0.116
   learning_rate | 1e-06
                     0.0449
   loss
                     | 1250
   n updates
   policy_gradient_loss | -0.000578
   value_loss
                     0.17
rollout/
  ep len mean
                     1.92e+04
  ep_rew_mean
                     | 622
time/
  fps
                     | 119
   iterations
                     | 127
   time_elapsed
                     | 542
                   65024
  total_timesteps
train/
                     0.0003767385
  approx kl
   clip_fraction
   clip range
                     0.2
                     | -1.87
   entropy_loss
   explained_variance | -0.111
   learning_rate
                     l 1e-06
                     0.0526
                     | 1260
   n updates
   policy gradient loss | -0.00164
   value_loss | 0.135
rollout/
                     | 1.92e+04
  ep_len_mean
  ep_rew_mean
time/
                     | 119
                     | 128
  iterations
                   546
| 65536
  time_elapsed
  total_timesteps
train/
                     6.130489e-05
  approx kl
   clip_fraction
                     | 0.2
   clip_range
   entropy_loss
                     | -1.87
   explained_variance | -0.196
   learning_rate
                    | 1e-06
                     0.0487
                    1270
   n updates
   policy_gradient_loss | 1.41e-06
   value_loss | 0.136
rollout/
                    | 1.92e+04
  ep_len_mean
  ep_rew_mean
time/
                     119
  iterations
                     | 129
                   550
   time elapsed
   total_timesteps
                     | 66048
train/
                     | 5.6400895e-05
  approx_kl
   clip_fraction
   clip_range
                     0.2
   entropy_loss
                     | -1.87
   explained variance | 0.911
   learning rate
                     le-06
                      0.446
   loss
   n_updates
                     | 1280
   policy_gradient_loss | -0.000715
   value_loss | 1.7
  ep len mean
                     | 1.66e+04
                     | 744
   ep_rew_mean
```

```
time/
                        120
   fps
   iterations
                        130
                        554
   time_elapsed
                      66560
   total_timesteps
                        0.0009996303
   approx kl
   clip_fraction
                      0.00254
   clip_range
                      0.2
   entropy_loss
                      | -1.85
   explained_variance | 0.504
   learning_rate
                      | 1e-06
                      | 86.5
   loss
                      | 1290
   n_updates
   policy_gradient_loss | 3.85e-05
   value_loss | 379
rollout/
   ep_len_mean
                        1.66e+04
  ep_rew_mean
time/
                        120
  fps
  iterations
                      | 131
                     | 558
   time elapsed
  total_timesteps
                     67072
train/
                      | 8.2321e-05
  approx_kl
   clip fraction
                      0.2
   clip_range
   entropy_loss
                      | -1.85
   explained_variance | 0.536
   learning_rate
                      | 1e-06
   loss
                      1 33.3
                      | 1300
   n updates
   policy_gradient_loss | -0.000287
   value loss
  ep_len_mean
                      | 1.66e+04
  ep_rew_mean
                      | 744
time/
  fps
                      i 120
                      | 132
  iterations
                     | 562
   time elapsed
   total_timesteps
                      67584
train/
                      0.0014076898
  approx_kl
                     | 0.0043
   clip_fraction
   clip_range
                      0.2
                      | -1.82
   entropy_loss
   explained_variance | 0.516
                    | 1e-06
   learning_rate
                      | 123
   loss
   n updates
                     | 1310
   policy_gradient_loss | 0.00213
   value loss
                      | 392
rollout/
  ep len mean
                        1.66e+04
   ep rew mean
                      1 744
time/
                      | 120
  fps
   iterations
                      | 133
                      | 567
   time_elapsed
  {\tt total\_timesteps}
                      | 68096
train/
   approx kl
                      0.00023528456
   clip_fraction
   clip range
                      0.2
   entropy_loss
                      | -1.83
   explained variance
                     0.2
                      l 1e-06
   learning_rate
                      0.228
                      | 1320
   n_updates
   policy gradient loss | -9.64e-05
   value_loss
rollout/
                      | 1.66e+04
  ep_len_mean
```

```
ep rew mean
                        | 744
 time/
                         120
    fps
                       | 134
    iterations
                       | 571
    time_elapsed
    total_timesteps
                      | 68608
 train/
                       8.509995e-05
    approx_kl
    clip_fraction
    clip_range
entropy_loss
                      | 0.2
                       | -1.83
    explained_variance | 0.172
                       | 1e-06
    learning_rate
                       | 0.156
    loss
    n updates
                       1330
    policy_gradient_loss | 0.000229
    value loss
 rollout/
    ep len mean
                       | 1.66e+04
    ep_rew_mean
                       | 744
 time/
                       1 120
    fps
    iterations
                      | 135
    time_elapsed
                    | 575
| 69120
    total timesteps
 train/
    approx kl
                       0.00028744922
                      | 0
    clip_fraction
                      | 0.2
| -1.84
    clip_range
entropy_loss
    explained variance | 0.143
    learning_rate | 1e-06
                       0.112
    n_updates
                       1340
    policy_gradient_loss | -0.000939
               | 2.84
    value_loss
 rollout/
    ep_len_mean
                         1.66e+04
    ep rew mean
                       | 744
 time/
    fps
                       | 120
                       | 136
    iterations
    time_elapsed
                     | 579
| 69632
    total_timesteps
 train/
    approx_kl
                       | 5.1669194e-05
    clip_fraction
                      0.2
    clip range
    entropy_loss
                       | -1.84
    explained_variance | 0.373
    learning_rate | 1e-06
                      | 1350
    n_updates
    policy_gradient_loss | 0.000303
    value_loss | 1.54
 rollout/
                       | 1.66e+04
    ep len mean
    ep rew mean
 time/
   fps
                       | 119
    iterations
                       | 137
                     | 584
| 70144
    time elapsed
    total_timesteps
 train/
                       2.7520931e-05
    approx_kl
    clip fraction
                      | 0.2
    clip_range
    entropy loss
                       | -1.84
    explained_variance | 0.552
    learning_rate
                       le-06
                       | 18
    loss
    n_updates
                       | 1360
    policy_gradient_loss | -0.000139
    value_loss | 70
| rollout/
```

```
ep len mean
                       | 1.66e+04
   ep_rew_mean
                       | 744
time/
   fps
                       | 119
   iterations
                       | 138
   time_elapsed
                      | 589
                      70656
   total timesteps
train/
   approx kl
                       | 6.8199355e-05
   clip_fraction
                      | 0.2
   clip_range
                      | -1.84
   entropy_loss
   explained variance | 0.129
   learning_rate
                     | 1e-06
                       0.0714
                      1370
   n_updates
   policy gradient loss | -9.31e-05
   value loss | 0.626
rollout/
                    | 1.66e+04
| 744
   ep_len_mean
   ep_rew_mean
time/
                      | 119
  iterations | 139
time_elapsed | 593
total_timesteps | 71168
train/
                      | 0.00011016033
   approx_kl
                     | 0
| 0.2
   clip fraction
   clip_range
   entropy_loss
                     | -1.85
   explained_variance | -0.462
   learning_rate | 1e-06 loss | 0.0847
              | 1380
   n updates
   policy_gradient_loss | -0.000537
   value_loss | 0.535
rollout/
                    | 1.66e+04
| 744
   ep len mean
   ep_rew_mean
time/
  fps
                       | 119
   iterations
                      | 140
                     | 597
| 71680
   time elapsed
   total_timesteps
train/
                      2.8955052e-05
   approx_kl
   clip_fraction
   clip_range
                     | 0.2
   entropy_loss | -1.85
explained_variance | -0.197
   learning_rate
                      | 1e-06
                      0.0582
   loss
   n updates
                       | 1390
   policy_gradient_loss | 9.26e-06
   value loss | 0.358
rollout/
   ep_len_mean
ep_rew_mean
                    | 1.66e+04
| 744
time/
                       | 119
  fps
   iterations
                      | 141
                     601
72192
   time_elapsed
   total_timesteps
train/
   approx kl
                     0.00035708037
   clip_fraction
                     | 0
                     | 0.2
   clip range
                      | -1.85
   entropy_loss
   explained variance | 0.0259
                      | 1e-06
   learning_rate
   loss
                       | 0.0516
   n_updates
                       | 1400
   policy_gradient_loss | -0.00123
   value_loss
                 | 0.25
```

```
rollout/
                        1.66e+04
   ep_len_mean
  ep rew mean
                      744
time/
                      1 120
  fps
   iterations
                      | 142
   time elapsed
                      i 605
                      72704
  total_timesteps
                      | 0.00012936594
  approx_kl
  clip_fraction
                     | 0.2
  clip_range
                      | -1.85
  entropy_loss
   explained variance | -0.217
   learning_rate | 1e-06
  loss
                      i 0.0857
  n updates
                      1410
   policy_gradient_loss | -0.000407
   value_loss | 0.233
rollout/
                    i 1.66e+04
| 744
  ep len mean
  ep_rew_mean
time/
                      | 120
  fps
                    143
   iterations
   time_elapsed
                     | 610
  total_timesteps
                     73216
train/
                    .
| 0.000106842956
| 0
   approx_kl
  clip_fraction
                     | 0.2
   clip_range
  entropy_loss | -1.85
explained_variance | -0.0482
   learning_rate
                      i 1e-06
  loss
                     0.0473
                     | 1420
  n_updates
   policy_gradient_loss | -0.000308
   value_loss | 0.164
rollout/
                      1.66e+04
  ep_len_mean
   ep rew mean
                      | 744
time/
                      | 120
  fps
                     144
  iterations
   time_elapsed
                    | 614
                     73728
  total timesteps
train/
  approx kl
                      0.000120338984
   clip_fraction
  clip_range
                      0.2
   entropy_loss
                      | -1.85
   explained variance | 0.139
   learning_rate
                     | 1e-06
   loss
                      0.0269
                      | 1430
   n_updates
   policy_gradient_loss | -0.000326
   value_loss
                      | 0.117
```

rollout/	
ep_len_mean	1.66e+04
ep_rew_mean	744
time/	
fps	120
iterations	145
time_elapsed	618
<pre>total_timesteps</pre>	74240
train/	
approx_kl	6.2934705e-05
clip_fraction	0
clip_range	0.2
entropy_loss	-1.85
<pre> explained_variance</pre>	0.0395
<pre> learning_rate</pre>	1e-06
loss	0.0415
n_updates	1440
<pre>policy_gradient_loss</pre>	-0.000239
value_loss	0.123

```
rollout/
                       1.66e+04
  ep len mean
   ep rew mean
                      | 744
time/
                      | 120
  fps
                       146
   iterations
   time elapsed
                      | 622
  total_timesteps
                     | 74752
train/
                      0.00018624973
  approx kl
   clip_fraction
                     0.2
  clip range
   entropy_loss
                      | -1.85
   explained variance | -0.208
                      l 1e-06
   learning_rate
                      0.0684
                      | 1450
   n_updates
   policy_gradient_loss | -0.00101
   value_loss | 0.162
rollout/
                       1.66e+04
   ep_len_mean
  ep_rew_mean
time/
                      | 120
                      | 147
  iterations
  time elapsed
                     | 626
                    | 75264
  total_timesteps
                      0.00013075734
  approx_kl
   clip_fraction
                     0.2
   clip_range
   entropy loss
                      | -1.84
   explained_variance | 0.844
   learning_rate
                      | 1e-06
                      9.84
  loss
   n_updates
                      | 1460
   policy_gradient_loss | -0.00082
   value_loss | 31
rollout/
   ep len mean
                      | 1.66e+04
  ep_rew_mean
time/
                      120
  fps
                     | 148
  iterations
                    | 630
   time_elapsed
                      | 75776
   total_timesteps
train/
                      | 0.0004107186
  approx_kl
   clip_fraction
                      0.2
   clip_range
   entropy loss
                     | -1.82
   explained_variance | 0.71
   learning_rate | 1e-06
   loss
                      | 66.6
   n updates
                      | 1470
   policy_gradient_loss | 2.94e-05
   value loss
                      | 153
rollout/
                    | 1.66e+04
  ep_len_mean
  ep_rew_mean
                      | 744
time/
                       120
  fps
                       149
   iterations
                      | 635
   time_elapsed
```

total_timesteps

approx_kl
clip_fraction
clip_range

loss

n_updates

value_loss

entropy_loss

explained variance

policy_gradient_loss | 0.000254

learning_rate

train/

| 76288

0.2

| -1.83

| 1e-06

0.186

| 1.39

| 0.185

| 5.1656156e-05

rollout/ ep_len_mean | 1.66e+04 ep_rew_mean | 744 time/ 120 fps iterations 150 | 639 | 76800 time_elapsed total_timesteps | train/ 8.950487e-05 0 approx_kl clip_fraction clip_range | 0.2
entropy_loss | -1.83
explained_variance | -0.153 learning_rate l 1e-06 0.132 loss n_updates | 1490 policy_gradient_loss | -0.000673 value_loss | 1.27

rollout/	1 1
ep len mean	1.66e+04
ep_rew_mean	744
time/	
fps	120
iterations	151
time_elapsed	643
<pre>total_timesteps</pre>	77312
train/	
approx_kl	0.00018751656
clip_fraction	0
clip_range	0.2
entropy_loss	-1.83
<pre> explained_variance</pre>	-0.18
learning_rate	1e-06
loss	0.142
n_updates	1500
<pre>policy_gradient_loss</pre>	-0.000739
value_loss	0.899

1.66e+04
744
120
152
647
77824
6.49686e-05
0
0.2
-1.83
-0.113
le-06
0.137
1510
-0.000392
0.612

rollout/	1 1
ep len mean	1.66e+04
ep rew mean	j 744 j
time/	i i
fps	120
iterations	153
time_elapsed	651
<pre> total_timesteps</pre>	78336
train/	
approx_kl	9.454135e-05
<pre> clip_fraction</pre>	0
<pre> clip_fraction clip_range</pre>	0 0.2
• •=	1 "
clip_range	0.2
clip_range entropy_loss	0.2 -1.84
clip_range entropy_loss explained_variance	0.2 -1.84 -0.0712
clip_range entropy_loss explained_variance learning_rate	0.2

value_loss	0.443
rollout/	
ep len mean	l 1.66e+04
ep_rew_mean	744
time/	
fps	120
iterations	154
time_elapsed	656
total_timesteps	78848
train/	
approx_kl clip fraction	0.000119444216 0
clip_rraction	0.2
entropy_loss	-1.83
explained variance	0.72
learning_rate	le-06
loss	26.9
n_updates	1530
' ',_, _	0.000253
value_loss	63.9
rollout/	I I
ep len mean	1.66e+04
ep rew mean	744
time/	j
fps	120
iterations	155
time_elapsed	660
<pre> total_timesteps train/</pre>	79360
approx kl	l 5.813397e-05 l
clip_fraction	0
clip range	0.2
entropy loss	-1.84
explained_variance	0.18
learning_rate	1e-06
loss	0.11
n_updates	1540 -0.000176
<pre>policy_gradient_loss value loss</pre>	-0.000176 0.342
vatue_toss	
rollout/	
ep_len_mean	1.66e+04
ep_rew_mean	744
time/	
fps iterations	120 156
time elapsed	150 664
total timesteps	79872
train/	
approx_kl	0.000209386
clip_fraction	0
clip_range	0.2
entropy_loss	-1.84
explained_variance	-0.00307
<pre> learning_rate loss</pre>	1e-06 0.118
n_updates	1550
policy gradient loss	1 1
value_loss	0.255
rollout/	
ep_len_mean	1.66e+04
ep_rew_mean	744
time/ fps	
iterations	157
time elansed	I 669 I

time_elapsed total_timesteps | 669 80384 | train/ anny
approx_kl
clip_fraction
clip_range
entropy_loss
explained_variance 3.1490577e-05 j 0 0.2 -1.84 -0.101 learning_rate 1e-06 loss 0.0778 | 1560 n_updates

```
policy_gradient_loss | -0.000136
   value_loss | 0.247
                     | 1.66e+04
   ep_len_mean
  ep_rew_mean
time/
                      120
  fps
  iterations
                     | 158
                    673
   time elapsed
   total_timesteps
                      | 80896
train/
                     | 6.720028e-05
  approx_kl
   clip fraction
                     0.2
   clip range
  entropy_loss
                    | -1.84
   explained variance | -0.125
   learning_rate | 1e-06
                      0.0411
   loss
  n updates
                     | 1570
   policy_gradient_loss | -0.000125
   value_loss | 0.129
rollout/
  ep len mean
                     | 1.66e+04
  ep_rew_mean
                     | 744
time/
  fps
                      | 120
                      | 159
  iterations
                     | 677
  time elapsed
                    81408
  total_timesteps
train/
  approx kl
                     | 0.0003707083
   clip_fraction
   clip range
                    | 0.2
  entropy_loss | -1.84
explained_variance | -0.145
   learning_rate
                     | 1e-06
   loss
                      | 0.0419
   n updates
                     | 1580
   policy gradient loss | -0.00148
   value loss | 0.129
  ep_len_mean
                     | 1.66e+04
  ep_rew_mean
                    | 744
time/
  fps
                      | 120
                     | 160
  iterations
   time_elapsed
                    | 681
                    | 81920
  total_timesteps
train/
                     | 6.86025e-05
  approx kl
   clip_fraction
                    | 0
                    | 0.2
  clip_range
entropy_loss
                     | -1.83
   explained variance | -0.0205
   learning_rate
                    | 1e-06
                      0.0588
   loss
                     | 1590
   n_updates
   policy gradient loss | -0.00021
                      | 0.108
   value loss
rollout/
                    | 1.66e+04
   ep_len_mean
   ep_rew_mean
time/
                     | 120
                    | 161
   iterations
   time_elapsed
                     | 686
  total_timesteps
                      | 82432
train/
                    0.0005426486
  approx_kl
   clip fraction
   clip_range
                      0.2
   entropy loss
                      | -1.83
                      | -0.169
   explained_variance
   learning_rate
                      | 1e-06
```

0.0383

loss

n_updates policy_gradient_loss value_loss	1600 -0.0015 0.119
rollout/	
ep_len_mean	1.65e+04
ep_rew_mean time/	743
fps	120
iterations	162
time_elapsed	690
total_timesteps	82944
train/	0.00006700507
<pre> approx_kl clip_fraction</pre>	0.00026708597 0
clip_rraction clip range	1 0.2
entropy_loss	-1.83
	-0.0598
learning_rate	le-06
loss	0.06
n_updates	1610
<pre>policy_gradient_loss value_loss</pre>	-0.000841
vatue_toss	
rollout/	
ep_len_mean	1.65e+04
ep_rew_mean	743
time/	
fps iterations	120 163
time elapsed	103 694
total timesteps	83456
train/	i i
approx_kl	0.0016368447
clip_fraction	0.00664
clip_range	0.2
<pre> entropy_loss explained variance</pre>	-1.8 0.74
learning rate	1e-06
loss	140
n updates	1620
policy_gradient_loss	-0.000415
value_loss	371
rollout/	
ep_len_mean	1.65e+04
ep rew mean	743
time/	
	120
fps	1 1 6 4
iterations	164
iterations time_elapsed	698
iterations time_elapsed total_timesteps	'
iterations time_elapsed	698
iterations time_elapsed total_timesteps train/	698 83968
iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range	698
iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss	698
iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance	698 83968
iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate	698 83968
<pre>iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss</pre>	698 83968
<pre>iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss</pre>	698 83968 7.59043e-05 0 0.2 -1.8 -0.0922 1e-06 0.117 1630
iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates	698 83968 7.59043e-05 0 0.2 -1.8 -0.0922 1e-06 0.117 1630
<pre>iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss</pre>	698 83968 7.59043e-05 0 0.2 -1.8 -0.0922 1e-06 0.117 1630 -0.000167
iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss	698 83968 7.59043e-05 0 0.2 -1.8 -0.0922 1e-06 0.117 1630 -0.000167
<pre>iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss</pre> rollout/	698 83968 7.59043e-05 0 0.2 -1.8 -0.0922 1e-06 0.117 1630 -0.000167 2.49
iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss	698 83968 7.59043e-05 0 0.2 -1.8 -0.0922 1e-06 0.117 1630 -0.000167
<pre>iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean</pre>	698 83968 7.59043e-05 0 0.2 -1.8 -0.0922 1e-06 0.117 1630 -0.000167 2.49
<pre>iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps</pre>	698 83968 7.59043e-05 0 0.2 1.65e+04 743 120
<pre>iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations</pre>	698 83968 7.59043e-05 0 0.2 -1.8 -0.0922 1e-06 0.117 1630 -0.000167 2.49
<pre>iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed</pre>	698 83968 7.59043e-05 0 0.2 -1.8 -0.0922 1e-06 0.117 1630 -0.000167 2.49
<pre>iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps</pre>	698 83968 7.59043e-05 0 0.2 -1.8 -0.0922 1e-06 0.117 1630 -0.000167 2.49
<pre>iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/</pre>	698 83968 7.59043e-05 0 0.2 -1.8 -0.0922 1e-06 0.117 1630 -0.000167 2.49
<pre>iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx kl</pre>	698 83968 7.59043e-05 0
<pre>iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range</pre>	698 83968 7.59043e-05 0 0.2 -1.8 -0.0922 1e-06 0.117 1630 -0.000167 2.49
iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss	698 83968 7.59043e-05 0 0.2 -1.8 -0.0922 1e-06 0.117 1630 -0.000167 2.49 -1.65e+04 743 120 165 702 84480 0.00022923038 0 0.2 -1.81
iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance	698 83968 7.59043e-05 0 0.2 -1.8 -0.0922 1e-06 0.117 1630 -0.000167 2.49
iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss	698 83968 7.59043e-05 0 0.2 -1.8 -0.0922 1e-06 0.117 1630 -0.000167 2.49 -1.65e+04 743 120 165 702 84480 0.00022923038 0 0.2 -1.81

```
loss
                      | 0.17
                      | 1640
   n_updates
   policy_gradient_loss | -0.00078
   value_loss | 1.53
rollout/
                       1.65e+04
   ep_len_mean
  ep_rew_mean
                      | 743
time/
  fps
                       120
  iterations
                       166
  time elapsed
  total_timesteps
                      | 84992
train/
                      0.0002044912
  approx_kl
  clip fraction
                      0.2
   clip_range
   entropy_loss
                      | -1.81
   explained_variance | -0.199
   learning_rate
                      | 1e-06
                      0.0875
   n updates
                      | 1650
   policy_gradient_loss | -0.000811
   value loss
                      | 1.28
rollout/
  ep len mean
  ep_rew_mean
time/
                      | 120
  fps
  iterations
  time_elapsed
                     | 710
   total_timesteps
                      85504
train/
  approx kl
                      | 7.568754e-05
   clip_fraction
   clip_range
                      0.2
   entropy_loss
                     | -1.82
   explained_variance | -0.263
                     | 1e-06
   learning_rate
                      0.119
   n_updates
                      | 1660
   policy_gradient_loss | -0.000437
   value_loss | 0.891
  ep len mean
                      | 1.65e+04
  ep_rew_mean
                      | 743
time/
  fps
                      | 120
   iterations
                       168
   time_elapsed
                      | 714
  total_timesteps
                      | 86016
train/
                      | 0.00020214892
  approx kl
   clip_fraction
                      0.2
   clip_range
   entropy_loss
                      | -1.82
   explained variance | -0.0817
                      | 1e-06
   learning_rate
                      0.0784
   loss
   n_updates
                      | 1670
   policy_gradient_loss | -0.000761
   value_loss
                      0.524
rollout/
  ep_len_mean
                       1.65e+04
  ep_rew_mean
time/
                      120
  fps
                      | 169
   iterations
   time elapsed
  total_timesteps
                      | 86528
train/
                      0.00011157757
   approx_kl
   clip fraction
                      0.2
   clip_range
   entropy loss
                      | -1.82
                     | 0.728
   explained_variance
```

learning_rate	1e-06
loss	48.1
n_updates	1680
policy_gradient_loss	
value_loss	77.9
rollout/	
ep_len_mean	1.65e+04
ep_rew_mean	743
time/	
fps	120
iterations	170
time_elapsed	723
total_timesteps	87040
train/	
approx_kl	0.0004431908
clip_fraction	0.2
clip_range	0.2
<pre> entropy_loss explained variance</pre>	
explained_variance learning rate	-0.163 1e-06
tearning_rate loss	0.0489
n updates	1 1690
n_upuates policy_gradient_loss	
value loss	0.114
rollout/	
ep_len_mean	1.65e+04
ep_rew_mean	743
time/	
fps	120
iterations	171
time_elapsed	727
total_timesteps	87552
train/	
approx_kl	0.00033525296
clip_fraction	0
clip_range	0.2
entropy_loss	-1.82
• • =	0.0248
learning_rate	1e-06
loss	0.0322
n_updates	1700
policy_gradient_loss	
value_loss	0.0846
rollout/	I I
ep len mean	
ep_ten_mean	1.05e+04
ep_rew_mean time/	745
fps	
iterations	172
time elapsed	731
total timesteps	88064
train/	00001
approx_kl	0.00026162574
clip_fraction	0.00020102574
clip_range	0.2
entropy loss	-1.82
: : · · · · · · · · · · · · · · · · · ·	0.0999
: - -	1e-06
l loss	0.0325
n updates	1710
	1 1
DOCTES ALBOTELLE LOSS	
<pre>policy_gradient_loss value loss</pre>	0.0858
	0.0858
	0.0858
	0.0858
value_loss	0.0858
value_loss rollout/	:::
value_loss rollout/ ep_len_mean	
value_loss 	
value_loss	
value_loss	
value_loss	1.65e+04 743 120
<pre>value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed</pre>	1.65e+04 743 120 173 735
<pre>value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps</pre>	1.65e+04 743 120 173 735
<pre>value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/</pre>	1.65e+04
<pre>value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl</pre>	1.65e+04

```
learning_rate
                      | 1e-06
                      0.061
  loss
                      | 1720
  n_updates
  policy_gradient_loss | -0.000548
                | 0.113
  value loss
                       1.65e+04
  ep_len_mean
  ep_rew_mean
                      | 743
time/
  fps
                      | 120
  iterations
                       174
  time elapsed
                        739
  total timesteps
                      | 89088
                      | 0.00062003895
  approx_kl
  clip fraction
  clip_range
                      0.2
  entropy_loss
                      | -1.82
  explained_variance | -0.0334
                      | 1e-06
  learning_rate
                      0.049
  n updates
                      | 1730
  policy_gradient_loss | -0.00294
  value loss | 0.105
rollout/
  ep len mean
                        1.65e+04
                      | 743
  ep_rew_mean
                      | 120
  fps
                      | 175
  iterations
                      | 744
  time elapsed
  total_timesteps
                      | 89600
train/
  approx_kl
                      | 6.586569e-05
  clip_fraction
                      0.2
  clip_range
                      | -1.82
  entropy_loss
  explained_variance | -0.0302
                      l 1e-06
  learning_rate
                      0.0768
                      | 1740
  n updates
  policy_gradient_loss | -0.000234
  value loss | 0.107
rollout/
  ep_len_mean
                       1.65e+04
  ep_rew_mean
                      | 743
time/
                      | 120
  fps
  iterations
                      | 176
  time_elapsed
                    | 749
  total_timesteps
                      90112
train/
                      0.000915473
  approx kl
  clip_fraction
                      | 0
  clip range
                      0.2
  entropy_loss
                      | -1.81
  explained variance | 0.0831
                      | 1e-06
  learning_rate
                      0.0404
  loss
                      | 1750
  n_updates
  policy_gradient_loss | -0.0027
  value_loss
                      0.0957
  ep_len_mean
                      | 1.65e+04
                      743
  ep rew mean
time/
  fps
                      | 120
                      | 177
  iterations
                      | 753
  time elapsed
  total_timesteps
                      90624
train/
                      | 0.00029088347
  approx_kl
  clip_fraction
                      | 0
  clip_range
                      0.2
```

explained variance

| -0.197

<pre>entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss</pre>	-1.81
rollout/	l I
ep_len_mean	1.65e+04
ep_rew_mean	743
time/	
fps iterations	120 178
time_elapsed	757
total_timesteps	91136
train/	
approx_kl clip fraction	0.00043493207 0
clip_fraction clip range	0.2
entropy_loss	-1.81
<pre> explained_variance</pre>	0.0024
learning_rate	1e-06
loss n updates	0.0392 1770
. = .	-0.00194
	0.103
rollout/	
ep_len_mean	
ep_rew_mean	743
time/	j j
fps	120
iterations	179
<pre> time_elapsed total_timesteps</pre>	761 91648
train/	
approx_kl	0.0006358484
clip_fraction	0.000195
clip_range	0.2
<pre> entropy_loss explained variance</pre>	-1.77 0.584
learning rate	1e-06
loss	91.2
n_updates	1780
<pre>policy_gradient_loss value_loss</pre>	-0.000211 241
value_toss	
rollout/	
<pre> ep_len_mean ep rew mean</pre>	1.65e+04 743
time/	
fps	120
iterations	180
<pre> time_elapsed total timesteps</pre>	765 92160
train/	32100
approx_kl	0.0002433263
clip_fraction	0
clip_range	0.2
<pre> entropy_loss explained variance</pre>	-1.77 0.84
learning rate	1e-06
loss	20.2
n_updates	1790
. , , , , ,	0.00022 53.6
vatue_toss	
rollout/	
ep_len_mean	1.65e+04 743
ep_rew_mean time/	'->
fps	120
iterations	181
time_elapsed	770
<pre> total_timesteps train/</pre>	92672
approx_kl	 5.2010524e-05
approx_kl clip_fraction	 5.2010524e-05 0

```
clip_range
                     0.2
  entropy_loss
                    | -1.76
  explained_variance | 0.701
  learning_rate
                     | 1e-06
  loss
             | 1800
  n updates
  policy_gradient_loss | 0.000197
  value_loss | 76.2
rollout/
  ep_len_mean
                     | 1.65e+04
  ep_rew_mean
time/
                     120
  fps
                     | 182
  iterations
  time elapsed
                   93184
  total timesteps
train/
  approx_kl
                     | 0.00010332069
  clip_fraction
                    | 0.2
  clip_range
  entropy_loss | -1.78
explained_variance | 0.842
  learning_rate
                    | 1e-06
                    | 3.11
  n updates
  policy_gradient_loss | -0.000912
  value loss | 7.82
                     | 1.65e+04
  ep len mean
  ep_rew_mean
                     | 743
time/
                     | 120
  fps
  iterations
                    | 183
                   778
93696
  time_elapsed
  total_timesteps
                    0.00024309545
  approx_kl
  clip_fraction
                    | 0.2
  clip_range
                     | -1.78
  entropy_loss
  explained_variance | -0.178
  learning_rate | 1e-06
                     0.122
  n updates
  policy_gradient_loss | -0.00084
  value_loss | 0.513
                   1.65e+04
  ep_len_mean
  ep_rew_mean
                     | 743
                     | 120
                    | 184
  iterations
                   , ±64
| 782
  time_elapsed
  total_timesteps
                     94208
train/
                     | 1.3534096e-05
  approx kl
  clip fraction
  clip range
                    0.2
                    | -1.79
  entropy_loss
  explained_variance | 0.148
                     | 1e-06
  learning_rate
  loss
                     0.164
  n_updates
                    | 1830
  policy_gradient_loss | 0.000168
  value_loss | 0.498
rollout/
                     | 1.65e+04
  ep len mean
  ep_rew_mean
time/
                     | 120
                     | 185
  iterations
  time_elapsed
                     94720
  total_timesteps
train/
                     | 5.444314e-05 |
  approx_kl
```

```
clip_fraction
                      | 0
                     0.2
   clip_range
   entropy_loss
                      | -1.78
   explained_variance | -0.193
   learning_rate
                     | 1e-06
                     | 0.235
                    | 1840
   n updates
   policy_gradient_loss | -0.000353
   value_loss | 0.497
rollout/
  ep len mean
                       1.65e+04
  ep_rew_mean
time/
                      1 120
  fps
  iterations
                    | 790
  time_elapsed
  total timesteps
                     95232
train/
                      | 0.0001515185
  approx kl
   clip_fraction
  clip_range
                     0.2
   entropy_loss
                     | -1.78
   explained variance | -0.0507
                    | 1e-06
   learning_rate
                     0.127
  n_updates
                      | 1850
  policy_gradient_loss | -0.000558
   value_loss | 0.301
  ep_len_mean
                     | 1.65e+04
  ep_rew_mean
                      | 743
time/
  fps
                      | 120
                      | 187
  iterations
                    795
95744
   time_elapsed
  total_timesteps
                     | 0.00036772666
  approx kl
   clip_fraction
                     0.2
   clip range
   entropy loss
                     | -1.79
   explained variance | -0.069
   learning_rate
                      | 1e-06
  loss
                      0.129
   n_updates
                      | 1860
   policy_gradient_loss | -0.00112
   value_loss | 0.276
rollout/
                     | 1.65e+04
  ep_len_mean
  ep rew mean
                      | 743
time/
  fps
                      | 120
   iterations
                      | 188
   time elapsed
  total_timesteps
                      96256
train/
   approx_kl
                      0.00056229543
   clip fraction
                     0.2
   clip_range
                      | -1.79
   entropy_loss
   explained_variance | -0.00442
   learning_rate
                      | 1e-06
                      0.127
   loss
   n updates
                      | 1870
   policy_gradient_loss | -0.00164
rollout/
  ep len mean
                      1.65e+04
  ep_rew_mean
                      | 743
time/
                      | 120
                      | 189
  iterations
                      | 803
  time_elapsed
   total_timesteps
                      96768
train/
```

```
approx_kl
                      0.0006865078
   clip_fraction
  clip_range
entropy_loss
                     | 0.2
                      | -1.78
   explained_variance | -0.00536
   learning_rate
                    | 1e-06
                      0.105
   loss
            | 1880
   n updates
   policy_gradient_loss | -0.00211
   value_loss | 0.201
rollout/
                    | 1.65e+04
  ep_len_mean
ep_rew_mean
time/
                    | 190
  iterations
  time_elapsed
                     | 807
  total_timesteps
                      97280
train/
                     | 0.00016990537
  approx_kl
                    0 0.2
   clip_fraction
  clip_range
entropy_loss
                     | -1.77
   explained_variance | -0.0652
   learning_rate | 1e-06
             | 0.03.
                     | 0.0363
   loss
   n_updates
   policy_gradient_loss | -0.000443
rollout/
  ep len mean
                      | 1.65e+04
  ep_rew_mean
                      | 743
time/
                     | 120
  fps
                    | 191
| 811
| 97792
   iterations
  time_elapsed
  total_timesteps
train/
                     0.0001774251
  approx kl
   clip_fraction
                     0
  clip_range
                     | 0.2
  entropy_loss | -1.78
explained_variance | -0.185
   learning_rate
                      l 1e-06
                    0.0633
                     | 1900
   n_updates
   policy_gradient_loss | -0.000777
   value_loss | 0.143
rollout/
  ep_len_mean
                     | 1.65e+04
  ep_rew_mean
                    | 743
time/
  fps
                      | 120
                      | 192
  iterations
  time_elapsed | 815
total_timesteps | 98304
train/
  approx kl
                      0.0006344067
   clip_fraction
                     | 0
                     | 0.2
   clip_range
   entropy_loss
                      | -1.78
   explained_variance | -0.0607
   learning_rate
                    | 1e-06
                      0.0501
              | 1910
   n_updates
   policy_gradient_loss | -0.0025
   value loss | 0.111
rollout/
                    | 1.65e+04
  ep_len_mean
  ep_rew_mean
time/
                      | 120
                     | 193
  iterations
   time_elapsed
                      | 820
   total_timesteps
                      98816
```

```
train/
                      0.0012138832
   approx_kl
   clip fraction
                      | 0
                      0.2
   clip_range
                      | -1.77
   entropy_loss
   explained_variance | -0.119
   learning_rate | 1e-06
                      0.0354
   n updates
                     | 1920
   policy_gradient_loss | -0.00236
   value_loss | 0.103
rollout/
                        1.65e+04
   ep len mean
                      | 743
  ep rew mean
time/
                      | 120
  fps
   iterations
                      | 194
                      | 824
   time_elapsed
                      99328
  total_timesteps
train/
                      0.0004957975
  approx kl
   clip_fraction
   clip range
                      0.2
                      | -1.74
   entropy_loss
   explained_variance | 0.88
   learning_rate
                      | 1e-06
                      21.5
   loss
                      | 1930
   n_updates
   policy_gradient_loss | -0.000783
   value_loss | 65.7
rollout/
                      | 1.65e+04
  ep_len_mean
  ep_rew_mean
time/
  fps
                      | 120
                      | 195
  iterations
                     | 828
   time_elapsed
  total_timesteps
                     99840
train/
                      0.0006033289
  approx kl
   clip_fraction
  clip_range
entropy_loss
                      0.2
                      | -1.69
   explained_variance | 0.833
   learning_rate
                      | 1e-06
   loss
                      | 52.5
   n_updates
                      | 1940
   policy_gradient_loss | -0.0014
   value_loss
                      | 157
  ep_len_mean
ep_rew_mean
                    | 1.65e+04
                      | 743
time/
  fps
                      | 120
                      | 196
   iterations
                     | 833
   time elapsed
  total timesteps
                      | 100352
train/
                      0.000120597775
  approx_kl
   clip_fraction
                      0.2
   clip_range
   entropy_loss
                      | -1.7
   explained_variance | 0.632
   learning_rate | 1e-06
                      | 43.8
   loss
   n updates
                     | 1950
   policy_gradient_loss | -0.00129
   value loss
                      | 115
rollout/
  ep len mean
                      | 1.65e+04
  ep_rew_mean
                      1 743
time/
                      | 120
  fps
   iterations
                      | 197
                      | 837
  time_elapsed
```

```
{\tt total\_timesteps}
                      | 100864
train/
  approx kl
                      0.0002428405
   clip_fraction
                      | 0
                      0.2
   clip range
                     | -1.71
   entropy_loss
   explained_variance | -1.34
  learning_rate | 1e-06
                      0.145
   loss
   n_updates
                     | 1960
   policy_gradient_loss | -0.000765
   value_loss
              | 1.13
rollout/
  ep_len_mean
ep_rew_mean
                    | 1.65e+04
| 743
time/
  fps
                      120
                      | 198
   iterations
                    841
   time_elapsed
  total_timesteps
                     | 101376
train/
                      | 0.0005198731
  approx_kl
   clip fraction
                    | 0
  clip_range
entropy_loss
                    | 0.2
                      | -1.71
   explained_variance | -0.666
   learning_rate
                      le-06
                      0.0778
   loss
   n_updates
                      | 1970
   policy_gradient_loss | -0.000585
   value loss | 0.688
rollout/
  ep len mean
                     | 1.65e+04
                      | 743
  ep_rew_mean
time/
                      | 120
                     | 199
   iterations
  time_elapsed
                    | 845
   total timesteps
                      | 101888
train/
                     | 4.964636e-05
   approx kl
   clip_fraction
  clip_range
entropy_loss
                     0.2
                    | -1.69
   explained_variance | -0.679
   learning_rate | 1e-06
                      0.0995
                      | 1980
   n updates
   policy_gradient_loss | -0.000113
              | 0.583
   value loss
rollout/
                    | 1.65e+04
  ep len mean
   ep_rew_mean
                      | 743
time/
                      | 120
  fps
                     | 200
   iterations
   time_elapsed
                    | 849
| 102400
  total_timesteps
train/
                      | 0.00037927378
  approx_kl
   clip_fraction
   clip range
                     0.2
   entropy_loss
                     | -1.7
   explained_variance | -0.778
                      l 1e-06
   learning_rate
                      | 1990
   n_updates
   policy_gradient_loss | -0.00107
   value loss
                      0.63
                      | 1.65e+04
  ep_len_mean
  ep_rew_mean
time/
                       120
  fps
  iterations
                      | 201
```

```
time elapsed
                     854
                     | 102912
  total_timesteps
train/
                     0.00029301795
  approx kl
  clip_fraction
                     0.2
  clip_range
  entropy_loss
                     | -1.71
  explained_variance | -0.505
                     l 1e-06
  learning_rate
                     | 0.0736
  loss
                     | 2000
  n updates
  policy_gradient_loss | -0.00141
  value loss
                     0.293
rollout/
  ep len mean
                       1.65e+04
  ep rew mean
                     | 743
time/
                     | 120
  fps
  iterations
                    | 858
  time_elapsed
  total_timesteps
                    | 103424
train/
  approx kl
                     0.00042001822
  clip_fraction
  clip range
                     | 0.2
  entropy_loss
                     | -1.71
  explained variance | -0.397
  learning_rate | 1e-06
                     0.0722
  n_updates
                     2010
  policy_gradient_loss | -0.000977
  value_loss | 0.241
                    | 1.65e+04
  ep_len_mean
  ep_rew_mean
                     | 743
time/
                     | 120
                    | 203
  iterations
                   862
  time elapsed
  total_timesteps
                     103936
                     0.0004543477
  approx kl
  clip_fraction
  clip range
                     0.2
  entropy_loss
                     | -1.7
  explained_variance | -0.399
  learning_rate
                     | 1e-06
                     0.0604
  loss
  n updates
                     | 2020
  policy_gradient_loss | -0.00106
  value_loss | 0.216
rollout/
                     | 1.65e+04
  ep_len_mean
  ep_rew_mean
                     | 743
time/
                     120
  fps
  iterations
                     | 204
  time elapsed
  total timesteps
                    | 104448
train/
  approx_kl
                     | 0.00032730552
  clip_fraction
  clip_range
                     0.2
  entropy_loss
                     | -1.69
  explained_variance | -0.73
  learning_rate
                     | 1e-06
                      0.0992
  loss
                      2030
  n updates
  policy gradient loss | -0.0012
  value loss
                     0.262
  ep len mean
                     | 1.65e+04
                     | 743
  ep_rew_mean
time/
                      | 120
 fps
```

```
iterations
                       | 205
                       | 870
   time_elapsed
   total timesteps
                       104960
train/
                       0.0004484147
   approx kl
   clip_fraction
   clip_range
entropy_loss
                       0.2
                       | -1.68
   explained variance | -0.14
   learning_rate
                       | 1e-06
                       0.0842
   loss
                       2040
   n_updates
   policy_gradient_loss | -0.00116
                       0.213
   value loss
   ep_len_mean
ep_rew_mean
                        1.65e+04
                      743
time/
                       | 120
  fps
                       | 206
   iterations
                     874
105472
   time elapsed
   total_timesteps
                       | 0.00021016388
   approx_kl
   clip fraction
   clip_range
                      0.2
   entropy loss
                       -1.67
   explained_variance | -0.182
   learning_rate
                       | 1e-06
                       0.0605
   loss
                       | 2050
   n_updates
   policy_gradient_loss | -0.000653
   value loss | 0.131
rollout/
                     | 1.65e+04
   ep_len_mean
ep_rew_mean
                       | 743
time/
   fps
                       | 120
                       | 207
   iterations
                       | 878
   time elapsed
   total timesteps
                       | 105984
train/
                       0.00041943602
   approx_kl
   clip fraction
   clip_range
                      0.2
                      | -1.67
   entropy_loss
   explained_variance | -0.0381
   learning_rate
                       | 1e-06
   loss
                       0.0409
                       | 2060
   n updates
   policy_gradient_loss | -0.00101
   value loss
                       0.116
rollout/
                       | 1.65e+04
   ep len mean
   ep_rew_mean
                       | 743
time/
                       | 120
   fps
   iterations
   time elapsed
                     | 882
   total_timesteps
                       | 106496
train/
   approx kl
                       0.00049968483
   clip_fraction
   clip range
                       0.2
   entropy_loss
                       | -1.66
   explained variance | -0.336
   learning_rate
                       | 1e-06
                       0.0682
   n_updates
                       | 2070
   policy_gradient_loss | -0.000886
   value loss
                       0.139
                       | 1.78e+04
   ep_len_mean
   ep_rew_mean
time/
```

```
fps
                      | 120
                      | 209
   iterations
   time_elapsed
                      887
   total_timesteps
                      | 107008
train/
                      | 0.00050525926
   approx_kl
   clip fraction
  clip_range
entropy_loss
                      0.2
                     -1.63
   explained_variance | -0.205
   learning_rate | 1e-06
                      0.0841
   loss
                      2080
   n updates
   policy_gradient_loss | -0.0015
   value_loss
                      0.144
rollout/
  ep len mean
                      1.78e+04
                      | 750
  ep_rew_mean
time/
                      | 120
  fps
   iterations
                      | 210
                    | 891
| 107520
   time_elapsed
  total_timesteps
train/
                     | 0.0023892722
  approx kl
                      0.00293
   clip_fraction
   clip_range
                     0.2
  entropy_loss | -1.52
explained_variance | 0.833
  learning_rate
                      l 1e-06
                      | 105
   n updates
                      | 2090
   policy gradient loss | -0.00348
   value_loss | 317
rollout/
                      | 1.78e+04
  ep_len_mean
  ep_rew_mean
                      | 750
time/
                      | 120
                      | 211
  iterations
                    | 895
| 108032
  time_elapsed
  total_timesteps
train/
  approx kl
                      | 5.6263176e-05
   clip_fraction
  clip_range
                     | 0.2
                      | -1.54
   entropy_loss
   explained_variance | 0.65
   learning_rate
                     | 1e-06
                      35.8
2100
   loss
   n updates
   policy_gradient_loss | -0.00015
   value_loss | 79.3
rollout/
                    1.78e+04
  ep_len_mean
  ep_rew_mean
time/
                      120
  iterations
                     | 212
   time elapsed
  total_timesteps
                      | 108544
train/
                      | 0.0011093754
  approx_kl
   clip fraction
                      0.2
   clip_range
   entropy_loss
                     | -1.41
   explained variance | 0.806
   learning rate
                      l 1e-06
   loss
                      | 81.3
   n_updates
                      | 2110
   policy_gradient_loss | -0.00135
rollout/
                     | 1.78e+04
  ep len mean
                      | 750
  ep_rew_mean
```

```
time/
                        120
   fps
   iterations
                       213
                      | 903
   time_elapsed
                      109056
   total_timesteps
                      i 4.971167e-05
   approx kl
   clip_fraction
   clip_range
                      0.2
   entropy_loss
                      | -1.5
   explained_variance | 0.684
   learning_rate
                      | 1e-06
                      | 27.3
   loss
   n_updates
                      | 2120
   policy_gradient_loss | -0.000647
   value_loss | 113
rollout/
                       1.78e+04
  ep_len_mean
  ep_rew_mean
                     | 750
time/
                      | 120
  fps
  iterations
                      | 214
                     | 907
   time elapsed
  total_timesteps
                    109568
train/
                      | 0.00028443267
  approx_kl
   clip fraction
                     0.2
   clip_range
   entropy_loss
                      | -1.54
   explained_variance | -1.14
   learning_rate
                      | 1e-06
   loss
                      1 0.25
   n updates
                      | 2130
   policy_gradient_loss | -0.000204
   value loss
  ep_len_mean
                    | 1.78e+04
  ep_rew_mean
                     | 750
time/
  fps
                      i 120
                     | 215
  iterations
                    912
   time elapsed
   total_timesteps
train/
                      0 0001322322
   approx_kl
   clip_fraction
                     | 0
                     | 0.2
   clip_range
                     | -1.56
   entropy_loss
   explained_variance | -2.19
   learning_rate | 1e-06
                      0.339
  loss
   n updates
                     | 2140
   policy_gradient_loss | 0.000233
   value_loss | 1.8
rollout/
                     | 1.78e+04
  ep len mean
   ep rew mean
                      i 750
time/
                      | 120
  fps
                     | 216
   iterations
   time_elapsed
                      | 917
  total_timesteps
                      | 110592
train/
   approx kl
                     | 0.0008121539
   clip_fraction
                     0.2
   clip range
   entropy_loss
                      | -1.55
   explained variance | -1.76
                      i 1e-06
   learning_rate
                      0.151
                     | 2150
   n_updates
   policy gradient loss | -0.00131
   value_loss
rollout/
                      | 1.78e+04
  ep_len_mean
```

```
ep rew mean
                        | 750
 time/
                        120
    fps
                       | 217
    iterations
                      | 921
    time_elapsed
    total_timesteps
                      | 111104
                       0.00015385274
    approx_kl
    clip_fraction
                      į 0
    clip_range
entropy_loss
                      | 0.2
    entropy_loss | -1.58
explained_variance | -1.83
                       | 1e-06
    learning_rate
    loss
                       0.517
    n updates
                       2160
    policy_gradient_loss | -0.00035
    value loss | 1.06
 rollout/
    ep len mean
                        | 1.78e+04
    ep_rew_mean
                       | 750
 time/
                        120
   fps
                      | 218
    iterations
    time_elapsed
                    | 925
| 111616
    total timesteps
 train/
    approx kl
                       9.3973824e-05
    clip_fraction
                      | 0
    clip_range
entropy_loss
                      0.2
-1.58
    explained_variance | -1.78
    learning_rate | 1e-06
                       0.146
    n_updates
                       2170
    policy_gradient_loss | -7.52e-05
               | 0.551
    value_loss
 rollout/
                     | 1.78e+04
    ep len mean
    ep rew mean
                        | 750
 time/
                       | 120
    fps
   iterations | 219
time_elapsed | 929
total_timesteps | 112128
 train/
                       0.00016103568
    approx kl
    clip_fraction
                       0.2
    clip range
    entropy_loss
                       | -1.58
    explained_variance | -1.33
    learning_rate | 1e-06
                       0.131
    n_updates
                      | 2180
    policy_gradient_loss | -0.000159
    value_loss | 0.435
 rollout/
                       | 1.78e+04
    ep len mean
    ep rew mean
 time/
                       | 120
   fps
    iterations
                       | 220
                      933
112640
    time elapsed
    total_timesteps
 train/
                       0.000348413
    approx_kl
    clip fraction
                      | 0.2
    clip range
    entropy loss
                       | -1.56
    explained_variance | -1.48
    learning_rate
                       le-06
                        | 0.132
    loss
    n_updates
                        | 2190
    policy_gradient_loss | -0.00062
    value loss | 0.372
| rollout/
```

```
ep len mean
                        | 1.78e+04
   ep_rew_mean
                        | 750
time/
   fps
                        | 120
                        | 221
   iterations
   time_elapsed
                       | 937
   total timesteps
                      | 113152
train/
   approx kl
                        | 0.00037121843
   clip_fraction
                       | 0.2
   clip_range
                        | -1.55
   entropy_loss
   explained variance | -0.953
   learning_rate
                      | 1e-06
                        0.121
   loss
                        2200
   n_updates
   policy gradient loss | -0.000797
   value_loss | 0.302
rollout/
                     | 1.78e+04
| 750
   ep_len_mean
   ep_rew_mean
time/
                       | 120
   iterations | 222
time_elapsed | 942
total_timesteps | 113664
train/
                       | 9.2747854e-05
   approx_kl
                      | 0
| 0.2
   clip fraction
   clip_range | 0.2
entropy_loss | -1.45
   explained_variance | 0.273
   learning_rate | 1e-06
loss | 41
n_updates | 2210
   policy_gradient_loss | -0.000458
   value_loss | 164
rollout/
                     | 1.78e+04
| 750
   ep len mean
   ep_rew_mean
time/
   fps
                        120
   iterations | 223
time_elapsed | 946
total_timesteps | 114176
train/
                       0.0002392705
   approx_kl
                      | 0
   clip_fraction
                      | 0.2
   clip_range
   entropy_loss | -1.47
explained_variance | -0.396
   learning_rate
                       | 1e-06
                       | 0.244
   loss
   n updates
                        | 2220
   policy_gradient_loss | -0.000227
   value_loss | 3.68
rollout/
   ep_len_mean
ep_rew_mean
                     | 1.78e+04
| 750
time/
                        | 120
   fps
   iterations
                       | 224
                      950
| 114688
   time_elapsed
   total_timesteps
train/
   approx kl
                      0.00019989489
   clip_fraction
                      | 0
                      | 0.2
   clip range
                        | -1.47
   entropy_loss
   explained variance | -0.622
                       | 1e-06
   learning_rate
                        0.304
   n_updates
                        | 2230
   policy_gradient_loss | -0.000224
               | 2.64
   value_loss
```

```
rollout/
                          1.64e+04
   ep_len_mean
ep_rew_mean
time/
                         898
   fps
                         | 120
                         225
   iterations
   time_elapsed
total_timesteps
                          954
                         115200
                         0.001299006
   approx_kl
   clip_fraction clip_range
                         0.2
   entropy_loss
explained_variance
                         | -1.4
                        0.631
   learning_rate
                         l 1e-06
                         | 123
   loss
   n_updates
                         2240
   policy_gradient_loss | 0.00107
   value_loss | 347
```

rollout/	l I
ep_len_mean	1.64e+04
ep_rew_mean	898
time/	
fps	120
iterations	226
time_elapsed	958
<pre>total_timesteps</pre>	115712
train/	
approx_kl	0.00449112
clip_fraction	0.00391
clip_range	0.2
entropy_loss	-1.21
<pre> explained_variance</pre>	0.129
learning_rate	1e-06
loss	80.4
n_updates	2250
<pre>policy_gradient_loss</pre>	-0.0033
value_loss	368

ı	rollout/	1
İ	ep len mean	1.64e+04
İ	ep_rew_mean	898
	time/	
	fps	120
	iterations	227
	time_elapsed	962
	total_timesteps	116224
	train/	
	approx_kl	0.00049066346
	clip_fraction	0
	clip_range	0.2
	entropy_loss	-1.46
	explained_variance	0.31
	learning_rate	le-06
	loss	1.82
	n_updates	2260
	<pre>policy_gradient_loss</pre>	0.000343
	value_loss	6.13

rollout/	1 1
ep len mean	1.64e+04
l ep rew mean	898
time/	i i
fps	120
iterations	228
time_elapsed	967
<pre>total_timesteps</pre>	116736
train/	
approx_kl	0.0009267309
clip_fraction	0
clip_range	0.2
entropy_loss	-1.49
<pre> explained_variance</pre>	-0.563
<pre> learning_rate</pre>	1e-06
loss	0.157
n_updates	2270
<pre>policy_gradient_loss</pre>	-0.00119
value_loss	1.55

```
rollout/
                       1.64e+04
  ep len mean
   ep rew mean
                      1 898
time/
                      | 120
  fps
                      i 229
   iterations
   time_elapsed
                     | 971
                    117248
  total_timesteps
train/
                     | 0.00057850813
  approx kl
   clip_fraction
                     0.2
  clip_range
   entropy_loss
                      | -1.52
   explained variance | -0.367
                      l 1e-06
  learning_rate
                      0.15
                      | 2280
   n_updates
   policy_gradient_loss | -0.000936
   value_loss | 1.21
rollout/
                       1.64e+04
   ep_len_mean
  ep_rew_mean
time/
                      | 120
  iterations
                      | 230
  time elapsed
                    | 975
  total_timesteps
                    | 117760
                      0.00010220928
  approx_kl
   clip_fraction
                     0.2
   clip_range
   entropy loss
                      | -1.54
   explained_variance | -0.558
   learning_rate
                     | 1e-06
                      | 0.137
  loss
   n_updates
                     | 2290
   policy_gradient_loss | 0.000109
   value_loss | 0.739
rollout/
  ep len mean
                     | 1.64e+04
  ep_rew_mean
time/
  fps
                      120
                     | 231
  iterations
                    | 979
   time elapsed
   total_timesteps
                      | 118272
train/
                     | 8.196407e-05
  approx_kl
   clip fraction
                     0.2
   clip_range
   entropy_loss
                    | -1.54
   explained_variance | -0.473
   learning_rate | 1e-06
   loss
                      0.0943
   n updates
                      | 2300
   policy_gradient_loss | -0.000399
   value loss
                      0.548
rollout/
                    | 1.64e+04
  ep_len_mean
  ep_rew_mean
                      | 898
time/
                       120
  fps
                      | 232
   iterations
   time_elapsed
                      | 983
   total_timesteps
                     | 118784
train/
                      0.00035250734
  approx kl
   clip fraction
   clip range
                     0.2
   entropy_loss
                      | -1.49
   explained variance
                     | 0.712
```

l 1e-06

| 81.5 | 2310

| 190

policy_gradient_loss | -1.48e-05

learning_rate

loss

n_updates

value_loss

rollout/ ep_len_mean | 1.64e+04 ep_rew_mean | 898 time/ fps 120 iterations 233 time_elapsed | 119296 total_timesteps train/ 8.3913095e-05 0 approx_kl clip_fraction 0.2 clip_range | 0.2 entropy_loss | -1.45 explained_variance | -0.0781 learning_rate l 1e-06 loss 0.335 2320 n_updates policy_gradient_loss | 0.000289 value_loss | 4.57

rollout/	
ep_len_mean	1.64e+04
ep_rew_mean	898
time/	
fps	120
iterations	234
time_elapsed	992
<pre>total_timesteps</pre>	119808
train/	
approx_kl	0.0010882912
<pre> clip_fraction</pre>	0
clip_range	0.2
entropy_loss	-1.47
<pre> explained_variance</pre>	-0.354
learning_rate	1e-06
loss	0.389
n_updates	2330
<pre>policy_gradient_loss</pre>	-0.00279
value_loss	2.81

rollout/	ı ı
ep len mean	1.64e+04
ep rew mean	898
time/	İ
fps	120
iterations	235
time_elapsed	997
<pre>total_timesteps</pre>	120320
train/	
approx_kl	0.0014331315
clip_fraction	0
clip_range	0.2
entropy_loss	-1.51
<pre> explained_variance</pre>	-0.153
learning_rate	1e-06
loss	0.077
n_updates	2340
<pre>policy_gradient_loss</pre>	-0.00151
value_loss	1.89

rollout/	1 1
ep len mean	1.64e+04
: '	898
ep_rew_mean	090
time/	
fps	120
iterations	236
time_elapsed	1000
<pre> total_timesteps</pre>	120832
train/	
approx_kl	0.00013321603
clip_fraction	0
clip_range	0.2
entropy_loss	-1.54
<pre> explained_variance</pre>	-0.199
learning_rate	1e-06
loss	0.153
n_updates	2350
policy gradient loss	-0.000269

value_loss	1.33
rollout/	
ep_len_mean	1.64e+04
ep_rew_mean time/	898
fps	
iterations	237
time_elapsed	1004
<pre> total_timesteps train/</pre>	121344
approx kl	 0.00039430603
clip_fraction	0
clip_range	0.2 -1.55
<pre> entropy_loss explained variance</pre>	-1.55 -0.101
learning_rate	l 1e-06
loss	0.0881
<pre> n_updates policy_gradient_loss</pre>	2360 -0.000481
value_loss	0.7
rollout/	
rollout/ ep_len_mean	
ep_rew_mean	898
time/	
fps iterations	120 238
time elapsed	1009
total_timesteps	121856
train/	
approx_kl clip_fraction	4.1498337e-05 0
clip_range	0.2
entropy_loss	-1.54
<pre> explained_variance learning rate</pre>	-0.125 1e-06
loss	0.101
n_updates	2370
, , , , , , ,	5.08e-05 0.638
value_loss	
rollout/ ep len mean	 1.64e+04
ep_ten_mean	898
time/	j j
fps	120
iterations time elapsed	239 1013
total_timesteps	122368
train/	
approx_kl clip_fraction	0.00031693117 0
clip_range	0.2
entropy_loss	-1.54
<pre> explained_variance learning rate</pre>	-0.101 1e-06
· · · · · · · · · · · · · · · · · · ·	0.095
n_updates	2380
1 1 1 2	-0.000656
value_loss	0.429
rollout/	
<pre> ep_len_mean ep rew mean</pre>	1.64e+04 898
time/	
fps	120
iterations	240 1017
<pre> time_elapsed total timesteps</pre>	122880
train/	i i
approx_kl	0.0009949636
<pre> clip_fraction clip range</pre>	0 0.2
entropy_loss	-1.55
<pre> explained_variance</pre>	-0.393
learning_rate	1e-06
l loss	0 0912
loss n_updates	0.0912 2390

```
policy_gradient_loss | -0.0023
   value_loss | 0.339
                      | 1.64e+04
   ep_len_mean
  ep_rew_mean
time/
                      120
  fps
                     | 241
   iterations
   time_elapsed | 1021
total_timesteps | 123392
train/
                      | 0.00018194364
   approx_kl
  clip_fraction | 0 clip_range | 0.2 entropy_loss | -1.57
   explained_variance | -0.112
   learning_rate | 1e-06
                      0.0442
   loss
                      | 2400
   n updates
   policy_gradient_loss | -0.000341
   value_loss | 0.251
rollout/
                    | 1.64e+04
| 898
  ep len mean
  ep_rew_mean
time/
                       | 120
  fps
                      | 242
   iterations
  time_elapsed | 1025
total_timesteps | 123904
train/
                     0.00074143463
0.000391
  approx kl
   clip_fraction
  | 2410
   n updates
   policy gradient loss | -0.00122
   value_loss | 246
  ep_len_mean
ep_rew_mean
                      | 1.64e+04
                     898
time/
  fps
                       | 120
                      | 243
   iterations
                     1029
   time_elapsed
                     | 124416
   total_timesteps
train/
                      | 0.00040035427
  approx kl
  clip_fraction
clip_range
entropy_loss
                    0.2
                      | -1.57
   explained variance | -0.109
   learning_rate | 1e-06
                       0.252
   loss
   n_updates
                      | 2420
   policy gradient loss | -0.000362
   value loss
                       | 1.34
rollout/
                     | 1.56e+04
   ep_len_mean
   ep_rew_mean
time/
                      | 120
                     | 244
   iterations
                     | 1033
   time_elapsed
```

total_timesteps

entropy_loss

learning_rate

explained_variance | 0.634

approx_kl
clip_fraction
clip_range

train/

loss

| 124928

0.2

| -1.5

| 1e-06 | 176

| 0.0016003514

l n undates	2420
n_updates policy_gradient_loss	2430 -0.00311
value_loss	336
rollout/	
ep_len_mean	1.56e+04
ep_rew_mean	962
time/	
fps iterations	120 245
time elapsed	1036
total_timesteps	125440
train/	
approx_kl clip_fraction	0.0024518673 0.00117
clip_rraction	0.2
entropy_loss	-1.37
• • •	0.798
<pre> learning_rate loss </pre>	1e-06 137
n updates	2440
policy_gradient_loss	0.0024
value_loss	327
rollout/	
ep_len_mean	1.56e+04
ep_rew_mean	962
time/	
fps iterations	121 246
time elapsed	1040
total_timesteps	125952
train/	
approx_kl clip fraction	0.00039740454 0
clip_rraction	0.2
entropy_loss	-1.46
–	-0.669
learning_rate	l 1e-06
loss n updates	0.337 2450
policy gradient loss	
	4.52
rollout/	
ep_len_mean	1.56e+04
ep_rew_mean	962
time/	
fps iterations	121 247
time_elapsed	1044
total_timesteps	126464
train/	0 00016675051
approx_kl clip_fraction	0.00016675051 0
clip_range	0.2
entropy_loss	-1.48
–	0.824
learning_rate loss	1e-06 67.9
n updates	2460
policy_gradient_loss	0.000363
value_loss	111
rollout/	
ep_len_mean	1.56e+04
ep_rew_mean	962
time/	
iterations	248
time_elapsed	1048
total_timesteps	126976
train/	 0.00027967314
approx_kl clip fraction	0.0002/96/314
clip_range	0.2
entropy_loss	-1.53
	-0.815
learning_rate	1e-06

loss	0.103
n_updates	2470
<pre>policy_gradient_loss value_loss</pre>	-0.00059
"""	
rollout/	
ep_len_mean	1.56e+04 962
ep_rew_mean time/	, 902
fps	121
iterations	249
time_elapsed	1052
total_timesteps	127488
train/ approx_kl	
clip_fraction	0
clip_range	0.2
1 17	-1.53
	-0.4
<pre> learning_rate loss</pre>	1e-06 0.0623
n updates	2480
policy_gradient_loss	-0.000775
value_loss	0.229
rollout/	·
ep len mean	
ep_rew_mean	962
time/	
fps	121
iterations time elapsed	250 1056
total timesteps	128000
train/	
approx_kl	0.0003456655
clip_fraction	0
clip_range	0.2
<pre> entropy_loss explained variance</pre>	-1.52 -0.741
learning rate	1e-06
loss	0.106
n_updates	2490
policy_gradient_loss	
value_loss	0.242
rollout/	
ep_len_mean	1.56e+04
ep_rew_mean	962
time/ fps	
iterations	251
time elapsed	1060
total_timesteps	128512
train/	<u> </u>
approx_kl clip_fraction	0.0002856435 0
clip_rraction clip range	0.2
entropy_loss	-1.53
<pre> explained_variance </pre>	-0.677
learning_rate	1e-06
loss	0.151 2500
<pre> n_updates policy_gradient_loss </pre>	
	0.19
rollout/	
ep_len_mean ep rew mean	1.56e+04 962
time/	, 302
fps	121
iterations	252
time_elapsed	1064
<pre> total_timesteps train/</pre>	129024
train/ approx kl	
clip_fraction	0
clip_range	0.2
	-1.52
<pre> explained_variance </pre>	-0.732

```
learning_rate
                     | 1e-06
                      0.0645
  ιυss
n_updates
                      | 2510
   policy_gradient_loss | -0.000872
   value_loss | 0.206
  ep_len_mean
ep_rew_mean
                      | 1.56e+04
                    962
time/
  fps
                      | 121
                      | 253
  iterations
                     | 1068
   time_elapsed
                     | 129536
  total timesteps
train/
                      0.0003859579
  approx kl
   clip_fraction
                     | 0
                     | 0.2
  clip_range
entropy_loss
                      | -1.52
   explained_variance | -0.119
   learning_rate
                    | 1e-06
                      0.0496
   loss
              | 2520
   n_updates
   policy_gradient_loss | -0.000894
   value_loss | 0.118
rollout/
                    | 1.56e+04
  ep_len_mean
                      | 962
  ep rew mean
time/
                      | 121
                    | 254
  iterations
                    1073
  time_elapsed
  total_timesteps
                      | 130048
train/
                    0.0016416278
0
0.2
  approx_kl
   clip_fraction
  clip_range
entropy_loss
                     | -1.51
   explained_variance | -0.434
   learning_rate | 1e-06
                      0.0674
             | 2530
   loss
   n updates
   policy_gradient_loss | -0.00164
   value_loss | 0.15
rollout/
                      | 1.56e+04
  ep_len_mean
  ep_rew_mean
                      962
time/
                     | 121
  fps
  iterations | 255
time_elapsed | 1077
total_timesteps | 130560
train/
                      | 0.00077880535
  approx_kl
                     .
| 0
   clip fraction
  clip_range
                     | 0.2
  entropy_loss | -1.5
explained_variance | -0.705
                      l 1e-06
   learning_rate
                     | 0.113
   n updates
                      | 2540
   policy_gradient_loss | -0.00137
   value_loss | 0.203
rollout/
                      | 1.56e+04
   ep len mean
  ep_rew_mean
                      1 962
time/
                      | 121
  fps
  iterations
                    | 1082
| 131072
  time_elapsed
  total timesteps
train/
                      | 0.00028818147
  approx_kl
                      | 0
   clip_fraction
   clip range
                      0.2
                      | -1.53
   entropy_loss
```

```
explained variance
                    | -0.253
  learning_rate
                      | 1e-06
                      0.0439
  loss
                      | 2550
  n_updates
  policy_gradient_loss | -0.000554
               | 0.135
  value loss
                       1.56e+04
  ep_len_mean
  ep_rew_mean
                      | 962
time/
  fps
                      | 121
  iterations
                      | 257
                    | 1086
| 131584
  time elapsed
  total timesteps
                      | 0.00071169354
  approx_kl
  clip fraction
  clip_range
                      0.2
  entropy_loss
                      | -1.53
  explained_variance | -0.384
                    | 1e-06
  learning_rate
                      0.0815
  n updates
                     | 2560
  policy_gradient_loss | -0.00118
  value loss | 0.173
rollout/
  ep len mean
                        1.56e+04
                      962
  ep_rew_mean
                      | 121
  fps
                      | 258
  iterations
                      | 1090
  time_elapsed
  total_timesteps
                     | 132096
train/
  approx_kl
                      | 0.0009198907
  clip_fraction
                     0.2
  clip_range
                     | -1.54
  entropy_loss
  explained_variance | -0.666
                      l 1e-06
  learning_rate
                      | 0.0673
                      | 2570
  n updates
  policy_gradient_loss | -0.00204
  value_loss | 0.157
                      | 1.56e+04
  ep_len_mean
  ep_rew_mean
time/
                      | 121
  fps
  iterations
                    | 1094
  time_elapsed
                     | 132608
  total_timesteps
train/
                      0.00019435002
  approx kl
  clip_fraction
                     | 0
  clip_range
                      0.2
  entropy_loss
                     | -1.52
  explained variance | -0.773
  learning_rate
                     | 1e-06
  loss
                      | 0.0841
  n_updates
                      | 2580
  policy_gradient_loss | -0.000543
  value_loss
                      0.188
                     | 1.56e+04
  ep_len_mean
                      962
  ep rew mean
time/
  fps
                      | 260
  iterations
  time elapsed
                     | 1099
  total_timesteps
                      | 133120
train/
                      | 5.4066186e-05
  approx_kl
  clip_fraction
                      | 0
  clip_range
                      0.2
```

	-1.51 0.841	
·	l 1e-06	
loss	18.5	
'	2590	
policy_gradient_loss		
	41.8	
' – '		
rollout/		
ep_len_mean	1.56e+04	
ep_rew_mean	962	
time/		
fps	121	
iterations time elapsed	261 1103	
total_timesteps	133632	
train/	155052	
approx kl	0.0006178096	
clip_fraction	0	
clip_range	0.2	
entropy_loss	-1.31	
<pre> explained_variance </pre>	0.843	
! - !	1e-06	
loss	92.5	
	2600	
policy_gradient_loss		
value_loss	210	
rollout/	1	
ep_len_mean	1.56e+04	
ep_rew_mean	962	
time/		
fps	121	
iterations time elapsed	262 1107	
total timesteps	134144	
train/	154144	
approx kl	0.000834984	
clip_fraction	0	
clip_range	0.2	
entropy_loss	-1.5	
<pre> explained_variance </pre>	-0.318	
learning_rate	1e-06	
loss	0.184	
<pre> n_updates policy_gradient_loss </pre>	2610	
	0.404	
'\u\u\u\u\u\u\u\u\u\u\u\u\u\u\u\u\u\u\u		
rollout/		
ep_len_mean	1.56e+04	
ep_rew_mean	962	
time/		
fps iterations	121 263	
time elapsed	1111	
total_timesteps	134656	
train/		
approx_kl	7.438043e-05	
clip_fraction	0	
clip_range	0.2	
entropy_loss	-1.48	
	-0.133	
learning_rate	le-06	
loss n updates	0.136 2620	
n_upuates policy_gradient_loss		
value_loss	0.364	
rollout/	1.50-:04	
ep_len_mean	1.56e+04	
ep_rew_mean time/	962	
time/ fps		
iterations	264	
time_elapsed	1115	
total_timesteps	135168	
train/	į	
approx_kl	0.00023365521	
clip_fraction	0	

```
clip_range
                      0.2
   entropy_loss
                     | -1.48
   explained_variance | -0.0728
   learning_rate
                      | 1e-06
   loss
                     | 0.135
   n updates
                    | 2630
   policy_gradient_loss | -0.00068
   value_loss | 0.367
rollout/
   ep_len_mean
                       1.56e+04
  ep rew mean
time/
                      | 121
  fps
                     | 265
   iterations
   time elapsed
                    | 1119
  total timesteps
                    | 135680
train/
  approx_kl
                      0.0006444376
   clip_fraction
                     0.2
   clip_range
   entropy_loss
                     | -1.49
   explained_variance | -0.163
   learning_rate
                     | 1e-06
                     | 0.19
   n updates
                     | 2640
   policy_gradient_loss | -0.00187
   value loss | 0.326
rollout/
   ep len mean
                       1.56e+04
  ep_rew_mean
time/
                      | 121
  fps
  iterations
                     | 266
                    | 1124
| 136192
  time_elapsed
  total_timesteps
train/
                     | 0.00038213748
  approx_kl
  clip_fraction
   clip_range
                     | 0.2
                      | -1.47
   entropy_loss
   explained variance | -0.0291
   learning_rate | 1e-06
                      | 0.118
   n updates
   policy_gradient_loss | -0.000881
   value_loss | 0.268
                    | 1.56e+04
  ep len mean
  ep_rew_mean
                     | 962
                     | 121
                    | 267
  iterations
                    1128
   time_elapsed
  total_timesteps
                     | 136704
train/
                     0.0003112976
  approx kl
   clip_fraction
   clip range
                     0.2
                     | -1.5
   entropy_loss
   explained_variance | -0.0582
                      | 1e-06
   learning_rate
   loss
                      0.131
   n_updates
                      | 2660
   policy_gradient_loss | -0.00102
   value_loss | 0.268
rollout/
                     | 1.56e+04
  ep len mean
  ep_rew_mean
time/
                      | 121
  iterations
                      | 268
   time elapsed
                     | 1132
                      | 137216
  total_timesteps
train/
                      | 0.00023340143 |
  approx_kl
```

```
clip_fraction
                      | 0
                      0.2
   clip_range
   entropy_loss
                      | -1.5
   explained_variance | -0.0379
   learning_rate
                      | 1e-06
                      0.152
   n_updates | 2670
policy_gradient_loss | -0.00105
   value_loss | 0.277
rollout/
  ep len mean
                       1.56e+04
  ep_rew_mean
time/
                      | 121
  fps
  iterations
                    | 1136
  time elapsed
  total timesteps
                     | 137728
train/
                      | 0.0011022892
  approx kl
   clip_fraction
  clip_range
                      0.2
   entropy_loss
                     | -1.51
   explained variance | -0.0597
                    | 1e-06
   learning_rate
                      | 0.117
                      | 2680
  n_updates
   policy_gradient_loss | -0.00188
   value_loss | 0.26
  ep_len_mean
                     | 1.56e+04
  ep_rew_mean
                      | 962
time/
  fps
                      | 121
                      | 270
  iterations
   time_elapsed
                     | 1140
| 138240
  total_timesteps
                      | 0.00082241837
  approx kl
   clip_fraction
                      0.2
   clip range
   entropy loss
                      | -1.55
   explained variance | -0.0979
   learning_rate
                      le-06
   loss
                      0.127
                    | 2690
   n_updates
   policy_gradient_loss | -0.00215
   value_loss | 0.289
rollout/
  ep_len_mean
                     | 1.56e+04
  ep rew mean
                      | 962
time/
  fps
                      | 121
   iterations
                      | 271
   time elapsed
                     | 1144
  total_timesteps
                      | 138752
train/
   approx_kl
                      0.00025147083
   clip fraction
                     | 0.2
   clip_range
   entropy_loss
                      | -1.57
   explained_variance | -0.711
   learning_rate
                      | 1e-06
                      0.0857
   loss
   n updates
                      | 2700
   policy_gradient_loss | -0.000352
rollout/
  ep len mean
                      1.56e+04
                      | 962
  ep_rew_mean
time/
                      | 121
                      | 272
   iterations
                      | 1148
  time_elapsed
   total_timesteps
                      | 139264
```

train/

explained_variance learning_rate loss n_updates policy_gradient_loss	
value_loss	0.115
rollout/ ep len mean	 1.56e+04
ep_rew_mean	962
time/ fps	
iterations	273
time_elapsed	1152
total_timesteps train/	139776
approx_kl	0.000385307
clip_fraction	0 0.2
<pre> clip_range entropy loss</pre>	0.2
explained_variance	0.755
j	1e-06 104
loss n updates	2720
policy_gradient_loss	
value_loss	167
rollout/	
ep_len_mean ep rew mean	1.56e+04 962
time/	i i
fps iterations	121
time elapsed	274 1156
total_timesteps	140288
train/ approx kl	 0.0040774113
clip_fraction	0.0040774113
clip_range	0.2
<pre> entropy_loss explained_variance</pre>	-1.3 0.86
	1e-06
loss	70.8
<pre> n_updates policy_gradient_loss</pre>	2730 0.000126
	190
rollout/	
ep_len_mean	1.56e+04
ep_rew_mean time/	962
fps	121
iterations time elapsed	275 1160
total_timesteps	140800
train/	
approx_kl clip_fraction	0.00028228317 0
clip_range	0.2
entropy_loss	-1.28 0.912
<pre> explained_variance learning rate</pre>	1e-06
loss	57
<pre> n_updates policy_gradient_loss</pre>	2740 -0 000266
	154
rollout/	
ep_len_mean	1.56e+04
ep_rew_mean time/	962
fps	
iterations	276
<pre> time_elapsed total_timesteps</pre>	1164 141312
	,

```
train/
                      6.6825654e-05
   approx_kl
   clip fraction
                      | 0
                      0.2
   clip_range
                      | -1.43
   entropy_loss
   explained_variance | -1.02
                    | 1e-06
   learning_rate
                      0.0842
   n updates
                      | 2750
   policy_gradient_loss | 0.000232
   value_loss | 0.709
rollout/
                        1.56e+04
   ep len mean
                      962
  ep rew mean
time/
  fps
                        121
   iterations
                      277
   time_elapsed
                      | 1168
  total_timesteps
                      | 141824
train/
                      0.0006680668
   approx kl
   clip_fraction
   clip range
                      0.2
                      | -1.43
   entropy_loss
   explained variance | -0.297
                      | 1e-06
   learning_rate
                      0.0846
   loss
                      | 2760
   n_updates
   policy_gradient_loss | -0.00115
   value_loss | 0.357
rollout/
  ep_len_mean
                        1.56e+04
   ep_rew_mean
time/
  fps
                      | 121
                      | 278
  iterations
                     | 1172
   time_elapsed
  total_timesteps
                      | 142336
train/
                      0.0006459082
  approx kl
   clip fraction
  clip_range
                      0.2
   entropy_loss
                      | -1.46
   explained_variance | 0.000749
   learning_rate
                      | 1e-06
   loss
                      0.0668
   n_updates
                      | 2770
   policy_gradient_loss | -0.00071
   value loss
                      0.395
  ep_len_mean
                    | 1.56e+04
  ep_rew_mean
                      | 962
time/
  fps
                      | 121
                      | 279
   iterations
                      | 1176
   time elapsed
  total timesteps
                      | 142848
train/
                      0.00022613932
  approx_kl
   clip_fraction
                      | 0
                      0.2
   clip_range
   entropy_loss
                      | -1.48
   explained_variance | -0.17
   learning_rate
                      | 1e-06
   loss
                      0.0856
   n updates
                      | 2780
   policy_gradient_loss | -0.000399
   value loss
                      0.248
rollout/
  ep len mean
                      | 1.56e+04
  ep_rew_mean
                      1 962
time/
                      | 121
  fps
   iterations
                        280
                      | 1180
   time_elapsed
```

```
total_timesteps
                       | 143360
train/
  approx kl
                       0.0001547623
   clip_fraction
                       | 0
   clip range
                      0.2
                      | -1.48
   entropy_loss
   explained_variance | -0.277
   learning_rate | 1e-06
                       0.0678
   loss
                     | 2790
   n_updates
   policy_gradient_loss | -0.000519
   value_loss
              | 0.214
rollout/
  ep_len_mean
ep_rew_mean
                     | 1.59e+04
| 1e+03
time/
  fps
                       | 121
                       | 281
   iterations
                     | 1183
   time elapsed
   total_timesteps
                     | 143872
train/
   approx_kl
                       | 0.00029796618
  clip_fraction
clip_range
entropy_loss
                     | 0.2
                       | -1.49
   explained_variance | 0.0566
   learning_rate
                       le-06
                       | 0.0932
   loss
   n_updates
                       | 2800
   policy_gradient_loss | -0.00126
   value loss | 0.225
rollout/
  ep len mean
                     | 1.59e+04
                     | 1e+03
   ep_rew_mean
time/
                       | 121
                  | 121
| 282
| 1187
   iterations
   time_elapsed
   total timesteps
                       | 144384
train/
                      0.0026736483
   approx_kl
   clip_fraction
                     0.00469
                     0.2
   clip_range
entropy_loss
   explained_variance | 0.733
   learning_rate | 1e-06
                       | 124
                       | 2810
   n updates
   policy_gradient_loss | 0.0055
   value loss
                       | 525
rollout/
  ep_len_mean
                    1.59e+04
   ep_rew_mean
                       | 1e+03
time/
                       | 121
  fps
  iterations | 283
time_elapsed | 1191
total_timesteps | 144896
train/
  approx_kl
                       | 0.0010056965
   clip_fraction
   clip range
                      0.2
                      | -1.24
   entropy_loss
   explained_variance | 0.822
                       i 1e-06
   learning_rate
                       87.5
                       | 2820
   n_updates
   policy_gradient_loss | -0.00292
   value loss
                       | 265
                       | 1.59e+04
   ep_len_mean
  ep_rew_mean
time/
                       | 121
  fps
                       | 284
  iterations
```

```
time elapsed
                       | 1195
                       | 145408
  total_timesteps
train/
                       0.0006447752
  approx_kl
  clip_fraction
                      0.2
  clip_range
                      i -1.22
  entropy_loss
  explained_variance
                     | 0.891
                      le-06
  learning_rate
  loss
                       | 43
                       | 2830
  n updates
  policy_gradient_loss | 0.000339
  value loss
rollout/
  ep len mean
                      1.59e+04
                      l 1e+03
  ep rew mean
time/
                       | 121
  fps
  iterations
                     | 1199
  time_elapsed
  total_timesteps
                     | 145920
train/
  approx kl
                      | 8.073682e-05
  clip_fraction
  clip range
                      0.2
  entropy_loss
                       | -1.24
  explained variance | 0.671
                      | 1e-06
  learning_rate
                       | 138
  n_updates
                      1 2840
  policy_gradient_loss | 8.39e-05
  value_loss | 184
                      | 1.59e+04
  ep_len_mean
  ep_rew_mean
                      | 1e+03
time/
                      | 121
                     | 286
  iterations
                    1203
  time_elapsed
  total_timesteps
                      | 146432
                      | 0.00022678275
  approx kl
  clip_fraction
                      0.2
  clip_range
                      | -1.28
  entropy_loss
  explained_variance | -1.04
  learning_rate
                      | 1e-06
                       0.466
  loss
  n updates
                      | 2850
  policy_gradient_loss | 0.000282
  value_loss
                      7.99
rollout/
                      | 1.47e+04
  ep_len_mean
  ep_rew_mean
                      | 1.08e+03
time/
                       121
  fps
  iterations
                      | 287
  time elapsed
  total timesteps
                     | 146944
train/
  approx_kl
                      | 0.00022352894
  clip_fraction
  clip_range
                      0.2
  entropy_loss
                      | -1.28
                     i -0.901
  explained_variance
  learning_rate
                       | 1e-06
                       0.622
  loss
                       2860
  n updates
  policy gradient loss | 0.000168
  value loss
  ep len mean
                      | 1.47e+04
                      | 1.08e+03
  ep_rew_mean
time/
                       | 121
  fps
```

```
iterations
                       | 288
   time_elapsed
                       | 1210
   total timesteps
                       | 147456
train/
                       | 0.002846971
   approx kl
   clip_fraction
                       | 0.00195
   clip_range
entropy_loss
                       0.2
                      | -1.24
   explained variance | 0.632
                       | 1e-06
   learning_rate
   loss
                       | 2870
   n_updates
   policy_gradient_loss | 5.51e-05
   value_loss
                       | 435
   ep_len_mean
ep_rew_mean
                        1.47e+04
                      1.08e+03
time/
                       | 121
  fps
                       | 289
   iterations
   time elapsed
                        1214
   total_timesteps
                      | 147968
                       | 0.0019887509
   approx_kl
   clip fraction
                      | 0.00117
                      0.2
   clip_range
   entropy loss
                       -1.14
   explained_variance | 0.864
   learning_rate
                       | 1e-06
                       | 110
   loss
   n_updates
                       | 2880
   policy_gradient_loss | -1.05e-05
   value loss | 235
rollout/
   ep_len_mean
                       | 1.47e+04
   ep_rew_mean
                       | 1.08e+03
time/
   fps
                       | 121
                       | 290
   iterations
                       | 1218
   time elapsed
   total timesteps
                       | 148480
train/
                       0.00063594675
   approx_kl
   clip fraction
   clip_range
                      0.2
   entropy_loss
                      | -1.36
   explained_variance | -0.302
   learning_rate
                       | 1e-06
   loss
                       0.115
   n updates
                       | 2890
   policy_gradient_loss | -0.000733
   value loss
                       0.806
rollout/
                       1.47e+04
   ep len mean
   ep_rew_mean
                       | 1.08e+03
time/
                       121
   fps
   iterations
   time elapsed
                     | 1222
   total_timesteps
                       | 148992
train/
   approx kl
                       0.00020179863
   clip_fraction
   clip range
                       0.2
   entropy_loss
                       | -1.35
   explained variance
                     | -1.81
   learning_rate
                       | 1e-06
                       0.362
   n_updates
                       | 2900
   policy_gradient_loss | -0.000566
                       0.929
   value loss
   ep_len_mean
                       | 1.47e+04
   ep_rew_mean
                       | 1.08e+03
time/
```

```
fps
                      | 121
                      | 292
   iterations
   time_elapsed
                      1226
   total_timesteps
                      | 149504
train/
   approx_kl
                     | 6.7086425e-05
   clip fraction
                     0.2
   clip_range
   entropy_loss
                     | -1.36
   explained_variance | -0.48
   learning_rate
                     | 1e-06
                      0.148
   loss
                      | 2910
   n updates
   policy_gradient_loss | -0.000188
   value_loss
                      0.46
rollout/
  ep len mean
                     1.47e+04
                     | 1.08e+03
  ep_rew_mean
time/
                      | 121
  fps
   iterations
   time_elapsed
                     | 1231
                    150016
  total_timesteps
train/
                     | 0.00038840226
  approx kl
   clip_fraction
   clip range
                     0.2
                     | -1.28
   entropy_loss
   explained_variance | 0.839
   learning_rate
                      l 1e-06
                      | 91
                     | 2920
   n updates
   policy gradient loss | 0.000205
   value_loss | 185
rollout/
                     | 1.37e+04
  ep_len_mean
  ep_rew_mean
                    | 1.16e+03
time/
                      | 121
  iterations
                     | 294
                    | 1235
| 150528
  time_elapsed
  total_timesteps
train/
                      0.0051777065
  approx kl
                     0.032
   clip_fraction
   clip_range
                     0.2
   entropy_loss
                      | -0.889
   explained_variance | 0.742
   learning_rate
                     | 1e-06
   loss
                      | 164
                      | 2930
   n updates
   policy_gradient_loss | -0.000855
   value_loss | 437
rollout/
                     | 1.37e+04
   ep_len_mean
  ep_rew_mean
                     1.16e+03
time/
                      | 121
  iterations
                     | 295
                    1239
   time elapsed
   total_timesteps
                      | 151040
train/
                      | 0.0010854648
  approx_kl
   clip_fraction
                     0.2
   clip_range
   entropy_loss
                     | -0.788
   explained variance | 0.422
   learning rate
                      le-06
   loss
                      I 321
                      | 2940
   n_updates
   policy_gradient_loss | -0.000451
  ep len mean
                     | 1.37e+04
                     | 1.16e+03
   ep_rew_mean
```

```
time/
                        121
   fps
   iterations
                       296
                      | 1243
   time_elapsed
                      | 151552
   total_timesteps
train/
                      0.0008864661
   approx kl
                      0.000586
   clip_fraction
   clip_range
                      0.2
                      | -1.04
   entropy_loss
   explained_variance | 0.868
                      | 1e-06
   learning_rate
   loss
                      | 2950
   n_updates
   policy_gradient_loss | 0.00235
   value_loss | 90.2
   ep_len_mean
                       1.37e+04
                    | 1.16e+03
  ep_rew_mean
time/
                      | 121
  fps
                      297
  iterations
                    | 1247
   time elapsed
  total_timesteps
                    | 152064
train/
                      | 0.00038323854
  approx_kl
   clip fraction
  clip_range
                      0.2
   entropy_loss
                      | -1.16
   explained_variance | -0.516
   learning_rate
                      | 1e-06
   loss
                      0.571
   n updates
                      1 2960
   policy_gradient_loss | 0.00113
   value loss
                 | 6.93
  ep_len_mean
ep_rew_mean
                     | 1.37e+04
                     | 1.16e+03
time/
  fps
                      i 121
                     | 298
  iterations
                     | 1251
   time elapsed
   total_timesteps
                     152576
train/
                      0 0006837228
   approx_kl
   clip_fraction
                     | 0
                     | 0.2
   clip_range
                      | -1.18
   entropy_loss
   explained_variance | -0.409
                    | 1e-06
   learning_rate
                      0.654
   loss
                      2970
   n updates
   policy_gradient_loss | -0.000674
   value_loss
                      | 4.42
rollout/
                    | 1.37e+04
  ep len mean
   ep rew mean
                      | 1.16e+03
time/
                      | 121
  fps
                     | 299
   iterations
                      | 1255
   time_elapsed
  total_timesteps
                      | 153088
train/
   approx kl
                      0.00023425941
   clip_fraction
                      0.2
   clip range
   entropy_loss
                      | -1.08
   explained variance | 0.799
   learning_rate
                      l 1e-06
   loss
                      | 147
                      | 2980
   n updates
   policy gradient loss | -0.000883
   value_loss
rollout/
                      | 1.37e+04
  ep_len_mean
```

```
ep rew mean
                        | 1.16e+03
 time/
                        121
    fps
                       | 300
    iterations
                       | 1259
    time elapsed
    total_timesteps
                      153600
                       0.0022188956
    approx kl
                      0.00313
    clip fraction
    clip_range
entropy_loss
                      | 0.2
    entropy_loss | -0.81
explained_variance | 0.564
    learning_rate
                       | 1e-06
                       | 151
    loss
                       | 2990
    n updates
    policy_gradient_loss | 0.00395
    value loss | 314
 rollout/
    ep len mean
                        | 1.37e+04
                       | 1.16e+03
    ep_rew_mean
 time/
                       | 122
    iterations
                      | 301
    time_elapsed
                    | 1263
| 154112
    total timesteps
 train/
    approx kl
                       | 0.001966787
                      0.000781
    clip_fraction
    clip_range
entropy_loss
                      0.2
-1.11
    explained variance | 0.911
    learning_rate | 1e-06
    loss
                       | 31.2
                       3000
    n_updates
    policy_gradient_loss | 0.000948
               | 60.8
    value_loss
 rollout/
                     1.37e+04
    ep len mean
    ep rew mean
                       | 1.16e+03
 time/
                       | 122
    fps
                     | 302
| 1267
| 154624
    iterations
    time_elapsed
    total_timesteps
 train/
    approx_kl
                       0.00033591443
    clip_fraction
                      0.2
    clip range
    entropy_loss
                       | -1.2
    explained variance | -0.607
    learning_rate | 1e-06
                       0.363
                      | 3010
    n_updates
    policy_gradient_loss | 1.34e-05
    value_loss | 4.15
 rollout/
                     1.37e+04
1.16e+03
    ep len mean
    ep rew mean
 time/
   fps
                       | 122
                       | 303
    iterations
                      | 1270
| 155136
    time elapsed
    total_timesteps
 train/
                       6.776827e-05
    approx_kl
    clip fraction
                      | 0.2
    clip_range
    entropy loss
                       -1.21
    explained_variance | -0.287
    learning_rate
                       le-06
                        | 0.31
    loss
                       3020
    n_updates
    policy_gradient_loss | 9.87e-06
    value_loss | 2.84
| rollout/
```

```
ep len mean
                       | 1.29e+04
   ep_rew_mean
                       | 1.25e+03
time/
                       i 122
   fps
                       304
   iterations
   time_elapsed
                      | 1274
   total timesteps
                     i 155648
train/
   approx kl
                       5.2899937e-05
   clip_fraction
   clip_range
                      | 0.2
   entropy_loss
                      | -1.12
   explained variance | 0.825
   learning_rate
                      | 1e-06
                       130
   loss
                       3030
   n_updates
   policy gradient loss | -3.85e-05
   value_loss | 165
rollout/
                      | 1.29e+04
   ep_len_mean
   ep_rew_mean
                     | 1.25e+03
time/
                      | 122
  iterations | 305
time_elapsed | 1278
total_timesteps | 156160
train/
                      0.00019114511
   approx_kl
                     | 0
| 0.2
   clip_fraction
   clip_range
   entropy_loss
                      | -0.859
   explained_variance | 0.385
   learning_rate | 1e-06
                      | 181
   loss
   n updates
                     | 3040
   policy_gradient_loss | 0.000808
              | 516
   value_loss
rollout/
                    | 1.29e+04
| 1.25e+03
   ep len mean
   ep_rew_mean
time/
  fps
                       122
   iterations
                      | 306
                     | 1282
| 156672
   time elapsed
   total_timesteps
train/
                      | 0.00055781857
   approx_kl
   clip_fraction
                      | 0
   clip_range
                     | 0.2
   entropy_loss | -1.04
explained_variance | 0.876
                      | 1e-06
   learning_rate
                      | 88.2
   loss
   n updates
                       3050
   policy_gradient_loss | -0.00149
                  | 246
   value loss
rollout/
   ep_len_mean
                     1.29e+04
                     1.25e+03
   ep rew mean
time/
                       | 122
  fps
   iterations
                     | 1286
   time_elapsed
   total_timesteps
                     | 157184
train/
   approx kl
                      0.0023851688
                     | 0.00664
   clip_fraction
   clip range
                      0.2
                       | -0.805
   entropy_loss
   explained variance | 0.51
                      | 1e-06
   learning_rate
   loss
                       | 80.9
   n_updates
                       3060
   policy_gradient_loss | 0.00336
                     | 373
   value_loss
```

```
rollout/
                        1.21e+04
   ep len mean
  ep rew mean
                      | 1.35e+03
time/
  fps
                      | 122
                      308
   iterations
   time elapsed
                        1290
   total_timesteps
                      | 157696
                      | 0.0062880777
  approx_kl
  clip_fraction
                      0.0457
                      0.2
   clip_range
  entropy loss
                      | -0.689
   explained variance | 0.776
   learning_rate | 1e-06
  loss
                      i 75.3
                      3070
  n updates
   policy_gradient_loss | -0.00236
   value loss | 213
rollout/
  ep_len_mean
ep_rew_mean
                      | 1.21e+04
                      | 1.35e+03
time/
                      | 122
  fps
   iterations
                      | 309
   time_elapsed
                      | 1294
  total_timesteps
                      | 158208
train/
   approx_kl
                      | 3.707083e-05
   clip_fraction
                      0.2
   clip_range
                      | -0.636
   entropy_loss
   explained variance | 0.383
                      l 1e-06
   learning_rate
   loss
                      | 238
                      3080
   n updates
   policy_gradient_loss | -0.000202
   value loss
                      | 387
rollout/
                      | 1.21e+04
  ep len mean
   ep rew mean
                      | 1.35e+03
time/
                      | 122
  fps
  iterations
                      | 310
  time_elapsed
                    | 1297
  total_timesteps
                     | 158720
train/
  approx kl
                      0.0002795459
   clip_fraction
  clip_range
                      | 0.2
                      | -0.799
   entropy_loss
   explained variance | 0.603
                      | 1e-06
  learning_rate
   loss
                        198
                      3090
   n_updates
   policy_gradient_loss | -0.000457
   value_loss
                     | 1.13e+04
   ep_len_mean
  ep_rew_mean
                      1.4e+03
time/
  fps
                      | 311
   iterations
                     | 1301
| 159232
   time elapsed
  total_timesteps
                      0.0018685575
  approx_kl
   clip fraction
   clip_range
                      0.2
   entropy loss
                      -0.588
   explained_variance
                     0.172
   learning_rate
                      | 1e-06
                      | 39.7
   n updates
                      | 3100
   policy_gradient_loss | -0.00177
   value loss
                      | 125
```

```
rollout/
                       1.13e+04
  ep len mean
   ep_rew_mean
                      | 1.4e+03
time/
                      | 122
  fps
   iterations
                      | 312
                      | 1305
   time elapsed
  total_timesteps
                     159744
train/
  approx kl
                      0.0005028484
   clip_fraction
  clip_range
                      0.2
   entropy_loss
                      | -0.654
   explained variance | 0.771
                      l 1e-06
  learning_rate
                      94.3
                      | 3110
   n_updates
   policy_gradient_loss | -0.000455
   value_loss | 472
rollout/
                      | 1.13e+04
   ep_len_mean
  ep_rew_mean
time/
                      | 122
  iterations
                      | 313
  time elapsed
                     | 1310
                    | 160256
  total_timesteps
                      0.0011456389
  approx kl
                     0.000586
   clip fraction
   clip_range
                     0.2
   entropy loss
                      | -0.563
   explained_variance | 0.816
   learning_rate
                      | 1e-06
  loss
                      | 120
   n_updates
                      | 3120
   policy_gradient_loss | 0.00229
   value_loss
rollout/
  ep len mean
                     | 1.13e+04
  ep_rew_mean
                     1.4e+03
time/
  fps
                      122
                     | 314
  iterations
                    | 1314
   time_elapsed
   total_timesteps
                      | 160768
train/
                      | 6.815116e-05
  approx_kl
   clip fraction
                      0.2
   clip_range
   entropy loss
                     -0.61
   explained_variance | 0.552
   learning_rate
                      | 1e-06
   loss
                      1 56
                      3130
   n updates
   policy_gradient_loss | 0.000877
   value loss
                      | 347
rollout/
                    | 1.07e+04
  ep_len_mean
                      | 1.5e+03
  ep_rew_mean
time/
  fps
                      | 122
   iterations
                      | 315
   time_elapsed
                      | 1318
   total_timesteps
                      | 161280
```

train/ 0.00060514454 approx kl clip_fraction 0.000977 clip range 0.2 | -0.539 entropy_loss explained variance | 0.77 learning_rate | 1e-06 loss | 3140 n_updates policy_gradient_loss | 0.00091 value_loss | 260

rollout/ ep_len_mean | 1.01e+04 1.45e+03 ep_rew_mean time/ 1 122 fps iterations | 316 time elapsed | 1322 | 161792 total_timesteps train/ 0.0022049856 approx_kl 0.0133 clip_fraction clip_range | 0.2 entropy_loss | -0.576 explained_variance | 0.595 learning_rate l 1e-06 | 318 loss n updates 3150 policy_gradient_loss | -0.00303 value loss | 693 ep_len_mean ep_rew_mean | 1.01e+04 | 1.45e+03 time/ | 122 fps iterations time_elapsed | 1325 | 162304 total timesteps train/ 0.00021232048 approx kl clip_fraction | 0 0.2 clip_range entropy_loss | -0.566 explained variance | 0.268 learning_rate | 1e-06

policy_gradient_loss | -0.00063
value_loss | 614

| 147

| 3160

loss

n_updates

rollout/ 1.01e+04 1.45e+03 ep len mean ep_rew_mean time/ | 122 fps 318 iterations | 1329 time_elapsed total_timesteps | 162816 train/ 3.5689212e-05 0 0.2 approx kl clip_fraction clip range | -0.545 entropy_loss explained_variance | 0.748 learning_rate | 1e-06 loss | 3170 n_updates policy_gradient_loss | 0.000487 value_loss | 105

.....

ı	rollout/	1
i	ep len mean	l 9.6e+03
i	ep rew mean	1.5e+03
i	time/	i i
i	fps	122
İ	iterations	319
İ	time_elapsed	1333
	<pre>total_timesteps</pre>	163328
	train/	
	approx_kl	0.0010338799
	clip_fraction	0.000781
	clip_range	0.2
	entropy_loss	-0.726
	<pre>explained_variance</pre>	0.845
	learning_rate	1e-06
	loss	76.1
	n_updates	3180
	policy_gradient_loss	0.000658

value_loss	256
rollout/	
ep_len_mean	9.6e+03
ep_rew_mean	1.5e+03
time/ fps	
iterations	122 320
time_elapsed	1337
total_timesteps	163840
train/	
approx_kl	8.338969e-05
<pre> clip_fraction clip range</pre>	0 0.2
entropy_loss	-0.647
explained_variance	0.572
learning_rate	1e-06
loss	357
<pre> n_updates policy_gradient_loss</pre>	3190 -0.000274
value loss	-0.000274
1	, . · · · · · · · · · · · · · · · · · ·
rollout/	
ep_len_mean	9.6e+03
ep_rew_mean time/	1.5e+03
fps	
iterations	321
time_elapsed	1341
total_timesteps	164352
train/	
approx_kl clip_fraction	6.1846455e-05 0
clip_rraction	1 0.2
entropy loss	-0.831
explained_variance	0.921
learning_rate	1e-06
loss	20.9 3200
<pre> n_updates policy_gradient_loss</pre>	-0.00047
value loss	124
rollout/	 9.6e+03
<pre> ep_len_mean ep rew mean</pre>	1.5e+03
time/	
fps	122
iterations	322
time_elapsed	1345
<pre> total_timesteps train/</pre>	164864
approx kl	 0.0006069355
clip_fraction	0
clip_range	0.2
entropy_loss	-0.846
<pre> explained_variance learning rate</pre>	0.821 1e-06
loss	45.9
n updates	3210
	-0.000265
value_loss	155
rollout/	
ep_len_mean	
ep_rew_mean	1.52e+03
time/	l İ
fps	122
iterations	323
time_elapsed	1349 165376
<pre> total_timesteps train/</pre>	
l approx kl	I 0.0022302172

anny
approx_kl
clip_fraction
clip_range
entropy_loss
explained_variance
learning_rate

loss n_updates | 0.0022302172 | | 0.00371 | | 0.2 | | -0.641 | | 0.831 | | 1e-06 | | 89.2 |

3220

```
policy_gradient_loss | 0.000598
   value_loss | 240
                     | 9.17e+03
   ep_len_mean
  ep_rew_mean
                    | 1.52e+03
time/
                     | 122
  fps
                    | 324
  iterations
                    1353
   time elapsed
                     | 165888
   total_timesteps
train/
                     0.00026182155
  approx_kl
   clip fraction
                     0.2
   clip range
  entropy_loss
                     | -0.58
   explained variance | -0.0268
   learning_rate | 1e-06
                      | 333
   loss
  n updates
                      3230
   policy_gradient_loss | -0.00123
   value_loss | 738
rollout/
                   8.75e+03
1.55e+03
  ep len mean
  ep_rew_mean
time/
  fps
                      | 122
                     | 325
  iterations
                    | 1357
| 166400
  time elapsed
  total_timesteps
train/
  approx kl
                     | 0.00027131976
   clip_fraction
   clip range
                    | 0.2
  entropy_loss | -0.609
explained_variance | 0.608
   learning_rate
                     | 1e-06
  loss
                      | 170
  n updates
                     3240
   policy gradient loss | -0.000444
   value_loss | 345
  ep_len_mean
                     | 8.75e+03
  ep_rew_mean
                    | 1.55e+03
time/
  fps
                      | 122
                     | 326
  iterations
   time_elapsed
                    | 1360
                    | 166912
  total_timesteps
train/
                     | 0.00049818214
  approx kl
   clip_fraction
                    | 0.000195
                    | 0.2
   clip_range
   entropy_loss
                     | -0.639
   explained variance | 0.0194
                    | 1e-06
   learning_rate
                      168
   loss
   n_updates
                      | 3250
   policy gradient loss | -0.00111
                      | 566
   value loss
rollout/
                    | 8.36e+03
   ep_len_mean
   ep_rew_mean
                     | 1.53e+03
time/
                     | 122
                    | 327
   iterations
  time_elapsed
                    | 1365
  total_timesteps
                      | 167424
train/
                    0.002133647
  approx_kl
   clip_fraction
                     0.0082
```

clip_range

entropy loss

loss

explained_variance

learning_rate

0.2

| -0.596

0.765

| 1e-06 | 60.7

n_updates policy_gradient_loss	
value_loss	137
rollout/	
ep_len_mean	8.36e+03 1.53e+03
ep_rew_mean time/	1.55e+05
fps	122
iterations	328
<pre> time_elapsed total timesteps</pre>	1369 167936
train/	
approx_kl	6.847747e-05
<pre> clip_fraction clip range</pre>	0 0.2
entropy_loss	-0.649
explained_variance	0.754
learning_rate loss	1e-06 347
n updates	3270
policy_gradient_loss	-0.000235
value_loss	596
rollout/	l I
ep_len_mean	8e+03
ep_rew_mean time/	1.51e+03
fps	122
iterations	329
time_elapsed	1373
total_timesteps train/	168448
approx_kl	0.0016970849
clip_fraction	0.00371
<pre> clip_range entropy loss</pre>	0.2 -0.596
explained_variance	0.489
learning_rate	le-06
l loss	67.2 3280
<pre> n_updates policy_gradient_loss</pre>	-0.000633
value_loss	175
rollout/	
ep_len_mean	7.66e+03
ep_rew_mean	1.49e+03
time/ fps	
iterations	330
time_elapsed	1377
<pre> total_timesteps train/</pre>	168960
approx_kl	0.00029787177
clip_fraction	0
<pre> clip_range entropy_loss</pre>	0.2 -0.604
entropy_toss explained variance	0.0531
learning_rate	le-06
l loss	125 3290
<pre> n_updates policy_gradient_loss</pre>	3290
value_loss	658
rollout/	I
ep_len_mean	7.35e+03
ep_rew_mean	1.46e+03
time/ fps	
iterations	331
time_elapsed	1381
<pre> total_timesteps train/</pre>	169472
approx kl	 0.00011738727
clip_fraction	j 0
clip_range	0.2
<pre> entropy_loss explained variance</pre>	-0.588
learning_rate	1e-06

loss	444
n_updates	3300
<pre>policy_gradient_loss</pre>	-0.000555
value_loss	533
rollout/	
ep_len_mean	7.35e+03
ep rew mean	1.46e+03
time/	j j
fps	122
iterations	332
time elapsed	i 1386 i
total_timesteps	169984
train/	
approx kl	0.00017556373
clip_fraction	0.00017330373
clip range	1 0.2
entropy loss	-0.673
explained variance	0.75
	!
learning_rate	1e-06
loss	102
n_updates	3310
1 , ,_3 _	0.000211
value_loss	589
rollout/	
ep_len_mean	7.1e+03
ep rew mean	1.46e+03
time/	į į
fps	1 122
iterations	333
time elapsed	1391
total timesteps	170496
	170490
train/	I 0.00020786794 I
approx_kl	!
clip_fraction	0
clip_range	0.2
entropy_loss	-0.837
<pre> explained_variance</pre>	0.776
learning_rate	1e-06
loss	120
n updates	3320
policy gradient loss	-7.95e-05
value_loss	268
rollout/	1
ep len mean	7.1e+03
ep rew mean	1.46e+03
1	
l time/	! !
time/	122
fps	122 334
fps iterations	334
fps iterations time_elapsed	334 1395
fps iterations time_elapsed total_timesteps	334
fps iterations time_elapsed total_timesteps train/	334
fps iterations time_elapsed total_timesteps train/ approx_kl	334
fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction	334
fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range	334
fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss	334
fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance	334
fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss	334
fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance	334
fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate	334
fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates	334
fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates	334
<pre>fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss</pre>	334
<pre>fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss</pre>	334
fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss	334
fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss	334
fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss	334
fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean	334
fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/	334
fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps	334 1395 171008 0.00027370336 0 0.2 -0.571 0.255 1e-06 59.9 3330 -0.00051 548
fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations	334
fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed	334
fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps	334
fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed	334
fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps	334
fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction	334
fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction	334
fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction	334
fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss	334

```
learning_rate
                      | 1e-06
  n_updates
                       | 105
                       3340
   policy_gradient_loss | -0.000829
   value_loss | 205
  ep_len_mean
ep_rew_mean
                       | 7.1e+03
                    1.46e+03
time/
                       | 122
  fps
                      | 336
  iterations
                     | 1403
   time_elapsed
                     | 172032
  total timesteps
train/
                      0.0004084825
  approx kl
   clip_fraction
                     | 0
  clip_range
entropy_loss
                     | 0.2
                      | -0.578
   explained_variance | 0.496
                     | 1e-06
   learning_rate
                       | 74.7
   loss
                      | 3350
   n_updates
   policy_gradient_loss | -0.000565
   value_loss | 184
rollout/
                     | 6.89e+03
  ep_len_mean
  ep rew mean
                      | 1.5e+03
time/
                      | 122
                     | 337
  iterations
                     | 1407
  time_elapsed
  total_timesteps
                      | 172544
train/
                     0.00020242098
0
0.2
  approx_kl
   clip_fraction
  clip_range
entropy_loss
                     | -0.838
   explained_variance | 0.724
   learning_rate | 1e-06
                      | 93.9
   loss
   n updates
                      | 3360
   policy_gradient_loss | 8.77e-05
   value loss
rollout/
                      | 6.89e+03
  ep_len_mean
  ep_rew_mean
                      | 1.5e+03
time/
                      | 122
  fps
  iterations | 338
time_elapsed | 1412
total_timesteps | 173056
train/
  approx_kl
                      | 0.00018898305
   clip fraction
                      | 0
  clip_range
                     | 0.2
  entropy_loss | -0.564
explained_variance | 0.33
                      | 1e-06
   learning_rate
                      | 600
   n updates
                       | 3370
   policy_gradient_loss | -0.000478
   value loss
              | 616
rollout/
                      | 6.89e+03
   ep len mean
                      | 1.5e+03
  ep_rew_mean
time/
                       | 122
  fps
  iterations
                      | 339
                     | 1416
| 173568
  time_elapsed
  total timesteps
train/
                       0.0013014468
  approx kl
                      | 0.0137
   clip_fraction
   clip range
                       0.2
                       | -0.547
   entropy_loss
```

```
explained variance
                     0.000724
   learning_rate
                       | 1e-06
   loss
                       | 115
   n_updates
                       3380
   policy_gradient_loss | 0.00279
   value loss
                       | 6.69e+03
   ep_len_mean
  ep_rew_mean
                       | 1.58e+03
time/
  fps
                       | 122
   iterations
                       | 340
                     | 1420
| 174080
   time elapsed
  total timesteps
                       | 0.00018450164
  approx_kl
  clip fraction
                       0.2
   clip_range
                       | -0.501
   entropy_loss
   explained_variance | 0.0965
                     | 1e-06
   learning_rate
                       | 91.8
   n updates
                      | 3390
   policy_gradient_loss | -0.000223
   value loss | 223
rollout/
   ep len mean
                       | 6.69e+03
                      | 1.58e+03
  ep_rew_mean
                       | 122
  fps
                      | 341
   iterations
                      | 1424
   time_elapsed
  total_timesteps
                     | 174592
train/
   approx_kl
                       | 0.0003994638
   clip_fraction
                      | 0.2
   clip_range
                      | -0.561
   entropy_loss
   explained variance | 0.416
                       l 1e-06
   learning_rate
                       | 177
  n_updates | 3400
policy_gradient_loss | 0.000226
   value loss | 621
                       | 6.48e+03
  ep_len_mean
   ep_rew_mean
                     | 1.59e+03
time/
                       | 122
  fps
  iterations
                    | 1428
   time_elapsed
  total_timesteps
                     | 175104
train/
                       0.0024597272
  approx kl
                      | 0.00781
   clip_fraction
  clip_range
entropy_loss
                      0.2
                      | -0.587
   explained variance | 0.716
   learning_rate
                     | 1e-06
   loss
                       | 3410
   n_updates
   policy_gradient_loss | -0.00291
   value_loss
                       | 136
                     | 6.48e+03
  ep_len_mean
                      1.59e+03
  ep rew mean
time/
                       | 122
  fps
                      | 343
   iterations
                      | 1433
   time elapsed
  total_timesteps
                       | 175616
                       | 0.00031352986
   approx_kl
   clip_fraction
                       | 0
   clip_range
                       0.2
```

learning_rate loss n_updates	-0.615 0.41 1e-06 202 3420 -0.000245 506
vatue_toss	
rollout/ ep_len_mean ep_rew_mean	6.28e+03 1.58e+03
time/ fps	
iterations time_elapsed total_timesteps	122
train/	 0.0038666418
approx_kl clip_fraction	0.0038000418 0.0541
	0.2
	-0.637
·	0.342 1e-06
l loss	30.9
n_updates	3430
. ,	-0.0047
value_loss	70.5
rollout/	
ep_len_mean	6.09e+03 1.56e+03
ep_rew_mean time/	1.500+05
fps	122
iterations	345
<pre> time_elapsed total timesteps</pre>	1441 176640
train/	170040
approx_kl	0.0007356275
clip_fraction	0.00234
clip_range	0.2 -0.7
· ! ·	0.452
learning_rate	le-06
loss	182
<pre> n_updates policy_gradient_loss </pre>	3440 -0.00353
	503
rollout/	
ep_len_mean	
ep_rew_mean	1.56e+03
time/	
fps iterations	122 346
time_elapsed	1446
total_timesteps	177152
train/ approx kl	 0.0012678399
_ : _ <u> </u>	0 0
clip_range	0.2
entropy_loss	-0.723
<pre> explained_variance learning rate</pre>	0.118 1e-06
l loss	555
n_updates	3450
	-0.00262
value_loss	678
rollout/	
<pre> ep_len_mean ep rew mean</pre>	5.92e+03 1.56e+03
ep_rew_mean time/	1.50 c 705
fps	122
iterations	347
<pre> time_elapsed total timesteps</pre>	1450 177664
train/	
approx_kl	0.00096350326
clip_fraction	0

```
clip_range
                      0.2
   entropy_loss
                      | -0.817
   explained_variance | 0.64
                      | 1e-06
   learning_rate
                      | 73.6
   loss
   n updates
                      | 3460
   policy_gradient_loss | -0.00141
   value_loss | 166
rollout/
                      | 5.92e+03
   ep_len_mean
  ep_rew_mean
                      | 1.56e+03
time/
                      | 122
  fps
                      | 348
   iterations
   time elapsed
                    | 178176
  total timesteps
train/
  approx_kl
                      0.0048780553
   clip_fraction
                      | 0.0314
                     | 0.2
   clip_range
  entropy_loss | -0.853
explained_variance | 0.35
   learning_rate
                     | 1e-06
                     | 593
                      | 3470
   n updates
   policy_gradient_loss | -0.00487
   value loss | 682
rollout/
                      | 5.76e+03
   ep len mean
                     1.59e+03
  ep_rew_mean
time/
                      122
  fps
  iterations
                     | 349
                    | 1458
| 178688
  time_elapsed
  total_timesteps
                      | 0.00041794975
  approx_kl
  clip_fraction
                      | 0.2
   clip_range
                      | -0.871
   entropy_loss
   explained_variance | 0.508
   learning_rate | 1e-06
                      | 48.8
   n updates
   policy_gradient_loss | -0.000626
   value_loss | 122
  ep_len_mean
                    5.76e+03
1.59e+03
  ep_rew_mean
                      | 122
                    350
  iterations
  time_elapsed | 1463
total_timesteps | 179200
train/
                      0.0015592298
  approx kl
                     0.000977
   clip fraction
   clip range
                     | -0.867
   entropy_loss
   explained_variance | -0.243
                      | 1e-06
   learning_rate
   loss
                      | 3490
   n_updates
   policy_gradient_loss | -0.00218
                      | 990
   value_loss
rollout/
                      | 5.61e+03
  ep len mean
  ep_rew_mean
                     1.59e+03
time/
  iterations
                      | 351
   time elapsed
  total_timesteps
                      | 179712
train/
                      | 0.0013145991 |
  approx_kl
```

```
clip_fraction
                       0.2
   clip_range
                       | -0.852
   entropy_loss
   explained_variance
                     0.809
   learning_rate
                      | 1e-06
                       | 59.2
                      3500
   n updates
   policy_gradient_loss | -0.0017
   value loss | 120
rollout/
   ep len mean
                        5.61e+03
                       | 1.59e+03
   ep_rew_mean
time/
                       i 122
  fps
   iterations
                       352
                      | 1472
   time elapsed
   total timesteps
                      | 180224
train/
  approx kl
                       0.0024104076
   clip_fraction
   clip_range
                       0.2
   entropy_loss
                      | -0.828
   explained variance | -0.0985
                      | 1e-06
   learning_rate
                       | 898
                       | 3510
   n_updates
   policy_gradient_loss | -0.00245
              | 873
   value_loss
   ep_len_mean
                       | 5.47e+03
   ep_rew_mean
                      | 1.59e+03
time/
  fps
                       | 122
                       | 353
   iterations
   time_elapsed
                      | 1476
   total_timesteps
                      | 180736
                      | 0.0031636087
  approx kl
   clip_fraction
                      0.0043
                      0.2
   clip range
   entropy_loss
                      | -0.882
   explained variance | 0.6
   learning_rate
                       | 1e-06
   loss
                       89.4
   n_updates
                      | 3520
   policy_gradient_loss | -0.00292
   value_loss
                      | 204
rollout/
                       | 5.47e+03
   ep_len_mean
   ep rew mean
                       | 1.59e+03
time/
  fps
                       | 122
   iterations
                       | 354
   time elapsed
                       1480
   {\tt total\_timesteps}
                       | 181248
train/
   approx_kl
                       0.001779889
   clip fraction
   clip_range
                      0.2
                       -0.859
   entropy_loss
   explained_variance
                      0.485
   learning_rate
                       | 1e-06
   loss
                        165
   n updates
                        3530
   policy_gradient_loss | -0.00228
rollout/
  ep len mean
                       | 5.47e+03
                       | 1.59e+03
   ep_rew_mean
time/
                       | 122
  fps
   iterations
                       | 355
                       | 1485
   time_elapsed
   total_timesteps
                       | 181760
train/
```

```
approx_kl
                       | 0.0042013116 |
   clip_fraction
                      0.0082
                     | 0.2
   clip_range
entropy_loss
                      | -0.956
   explained variance | 0.863
   learning_rate
                     | 1e-06
   loss
                      | 60.5
              | 3540
   n updates
   policy_gradient_loss | -0.00396
   value_loss | 137
rollout/
                     | 5.35e+03
  ep_len_mean
ep_rew_mean
                    1.59e+03
time/
                      122
                     | 356
   iterations
                     1489
   time_elapsed
   total_timesteps
                      | 182272
train/
                     | 0.0028733201
   approx_kl
                     0.00527
0.2
   clip_fraction
   clip_range
entropy_loss
                     i -1.09
   explained_variance | 0.895
   learning_rate | 1e-06
                      | 33.3
   loss
   n_updates
                      3550
   policy_gradient_loss | -0.00252
rollout/
                     5.35e+03
  ep len mean
  ep_rew_mean
                      | 1.59e+03
time/
                      | 122
  fps
  iterations | 357
time_elapsed | 1493
total_timesteps | 182784
train/
   approx kl
                      0.0006168402
                      0
   clip_fraction
   clip range
                     | 0.2
   entropy_loss | -1.03
explained_variance | 0.645
   learning_rate
                      l 1e-06
   loss
                      | 255
   n updates
                      | 3560
   policy_gradient_loss | -0.000933
   value_loss | 580
rollout/
   ep_len_mean
                     | 5.24e+03
                     1.59e+03
   ep_rew_mean
time/
                       | 122
  fps
                      | 358
  iterations
  time_elapsed | 1497
total_timesteps | 183296
train/
  approx kl
                      0.0015216335
   clip_fraction
                     | 0
                     | 0.2
   clip_range
   entropy_loss
                       | -1.18
   explained variance | 0.134
   learning_rate
                     | 1e-06
   loss
                      | 3570
   n_updates
   policy_gradient_loss | 6.45e-05
   value_loss | 65.1
rollout/
                    5.24e+03
1.59e+03
  ep_len_mean
  ep_rew_mean
time/
                       | 122
                      | 359
   iterations
   time_elapsed
                       | 1501
   total_timesteps
                       | 183808
```

```
train/
                        0.0007528404
   approx_kl
   clip fraction
                       | 0
                       0.2
   clip_range
                       | -0.937
   entropy_loss
   explained_variance | 0.261
   learning_rate
                       | 1e-06
                       | 425
                      3580
   n updates
   policy_gradient_loss | 0.000673
   value_loss | 663
rollout/
                        5.24e+03
   ep len mean
                       | 1.59e+03
   ep rew mean
time/
                        122
  fps
   iterations
                        360
                       | 1506
   time_elapsed
   total_timesteps
                       | 184320
train/
                       | 0.000747425
   approx kl
   clip_fraction
   clip range
                      0.2
                       | -1.01
   entropy_loss
   explained variance | 0.805
   learning_rate
                       | 1e-06
                       | 64.4
   loss
                       | 3590
   n_updates
   policy_gradient_loss | -0.000928
   value_loss | 157
rollout/
                       | 5.24e+03
   ep_len_mean
   ep_rew_mean
                     | 1.59e+03
time/
  fps
                       | 122
                      | 361
   iterations
                     | 1510
   time_elapsed
   total_timesteps
                      | 184832
train/
                       0.0010206284
  approx kl
   clip fraction
                      | 0.00117
   clip_range
                       0.2
   entropy_loss
                       | -0.943
   explained variance | 0.777
   learning_rate
                       | 1e-06
                       99.9
   loss
   n_updates
                        3600
   policy_gradient_loss | 0.000744
   value loss
   ep_len_mean
                      | 5.24e+03
  ep_rew_mean
                      | 1.59e+03
time/
  fps
                       | 122
   iterations
                       362
   time elapsed
                        1514
   total timesteps
                       | 185344
train/
                      | 0.00018107868
   approx_kl
                      0.00117
   clip_fraction
                       0.2
   clip_range
   entropy_loss
                       | -1.04
   explained_variance
                     0.442
                       | 1e-06
   learning_rate
   loss
                       | 137
   n updates
                       | 3610
   policy_gradient_loss | 0.00164
   value loss
                       | 245
rollout/
   ep len mean
                       | 5.16e+03
   ep_rew_mean
                       | 1.63e+03
time/
                       | 122
  fps
   iterations
                       | 363
                       | 1518
   time_elapsed
```

```
total_timesteps
                      | 185856
train/
  approx kl
                      0.0035606367
   clip_fraction
                      | 0.00918
                     0.2
   clip range
                     | -0.92
   entropy_loss
   explained_variance | 0.77
  learning_rate | 1e-06
                      87.4
   loss
   n_updates
                     | 3620
   policy_gradient_loss | -0.000809
   value_loss
              | 191
rollout/
  ep_len_mean
ep_rew_mean
                     | 5.16e+03
                    1.63e+03
time/
  fps
                     | 364
  iterations
                    1522
   time elapsed
  total_timesteps
                     | 186368
train/
                      | 0.0009297986
  approx_kl
   clip fraction
  clip_range
entropy_loss
                    | 0.2
                     | -0.898
   explained_variance | 0.41
   learning_rate
                     le-06
                      | 287
  loss
                      | 3630
   n_updates
   policy_gradient_loss | -8.4e-05
   value loss
rollout/
  ep len mean
                     | 5.04e+03
                     | 1.62e+03
  ep_rew_mean
time/
                      | 122
   iterations
  time_elapsed
                    | 1526
  total timesteps
                      | 186880
train/
                     0.010541381
  approx_kl
                    0.0246
   clip fraction
                    0.2
  clip_range
entropy_loss
   explained_variance | 0.713
   learning_rate | 1e-06
                      92.1
                      3640
   n updates
   policy_gradient_loss | -0.00642
   value loss
              | 194
rollout/
  ep_len_mean
                   | 4.93e+03
   ep_rew_mean
                     | 1.62e+03
time/
                      | 122
  fps
                   | 366
| 1531
| 187392
   iterations
   time_elapsed
  total_timesteps
train/
                     | 0.00063586514
  approx_kl
   clip_fraction
   clip range
                     | 0.2
   entropy_loss
                     | -0.754
   explained_variance | 0.188
                      | 1e-06
   learning_rate
                      | 3650
   n_updates
   policy_gradient_loss | -2.65e-06
   value loss
                      | 652
                      | 4.93e+03
  ep_len_mean
  ep_rew_mean
time/
                      | 122
  fps
  iterations
                      | 367
```

```
time elapsed
                      | 1535
  total_timesteps
                      | 187904
train/
                      0.0031020697
  approx kl
                      0.00781
  clip fraction
  clip_range
                      0.2
                      i -0.831
  entropy loss
  explained_variance | 0.471
                      le-06
  learning_rate
                      | 284
  loss
                      3660
  n updates
  policy_gradient_loss | -0.00549
  value loss
rollout/
                      | 4.93e+03
  ep len mean
                      | 1.62e+03
  ep rew mean
time/
                      | 122
  fps
  iterations
                     | 1539
  time_elapsed
  total_timesteps
                     | 188416
train/
  approx kl
                      0.00053070753
  clip_fraction
                      | 0.2
  clip range
  entropy_loss
                      | -0.866
  explained variance | 0.299
                      | 1e-06
  learning_rate
                      92.6
  n_updates
                      | 3670
  policy gradient loss | 0.000322
  value_loss | 160
                     | 4.93e+03
  ep_len_mean
  ep_rew_mean
                     | 1.62e+03
time/
                      | 122
                     | 369
  iterations
                    | 1543
  time elapsed
                      188928
  total_timesteps
                      0.0007334673
  approx kl
                     | 0.000391
  clip_fraction
  clip range
                      0.2
                      | -1.08
  entropy_loss
  explained_variance | 0.804
  learning_rate
                      | 1e-06
                      25.5
  loss
  n updates
                      | 3680
  policy_gradient_loss | -0.00135
  value_loss
             | 151
rollout/
  ep_len_mean
                      | 4.85e+03
  ep_rew_mean
                      | 1.64e+03
time/
                       122
  fps
                      370
  iterations
  time elapsed
  total timesteps
                      189440
train/
                      0.003999211
  approx_kl
  clip_fraction
                      0.00293
  clip_range
                      0.2
  entropy_loss
                      | -0.939
  explained_variance | 0.874
  learning_rate
                      | 1e-06
  loss
                       102
                      3690
  n updates
  policy gradient loss | -0.00266
  value loss
                      | 4.74e+03
  ep len mean
                      | 1.62e+03
  ep_rew_mean
time/
                      | 122
  fps
```

```
iterations
                       | 371
   time_elapsed
                       | 1552
   total timesteps
                       | 189952
train/
                       0.0019984944
   approx kl
   clip_fraction
                       0.2
   clip range
   entropy_loss
                       | -0.893
   explained variance
                      0.706
   learning_rate
                       | 1e-06
   loss
                       | 3700
   n_updates
   policy_gradient_loss | -0.00233
                       | 579
   value_loss
                       | 4.63e+03
   ep len mean
   ep rew mean
                       1.6e+03
time/
                       | 122
  fps
   iterations
                       | 372
   time elapsed
                        1557
   total_timesteps
                       | 190464
                       | 0.0035266844
   approx_kl
   clip fraction
                       0.00742
                       0.2
   clip_range
   entropy loss
                       | -0.865
   explained_variance | 0.265
   learning_rate
                       | 1e-06
   loss
                       l 176
   n_updates
                       | 3710
   policy_gradient_loss | -0.0043
   value loss
                       | 545
rollout/
   ep_len_mean
                       | 4.54e+03
   ep_rew_mean
                       | 1.61e+03
time/
   fps
                       | 122
                       | 373
   iterations
                       | 1561
   time elapsed
   total_timesteps
                       | 190976
train/
                       0.00016259542
   approx_kl
   clip fraction
   clip_range
                      0.2
                       | -0.828
   entropy_loss
                     | 0.289
   explained_variance
   learning_rate
                       | 1e-06
   loss
                       | 147
   n updates
                       | 3720
   policy_gradient_loss | -0.000356
   value loss
rollout/
                       4.45e+03
   ep len mean
   ep_rew_mean
                       | 1.6e+03
time/
                       | 122
   fps
                       | 374
   iterations
   time elapsed
                     | 1565
   total_timesteps
                       | 191488
train/
   approx kl
                       | 0.0006317167
   clip_fraction
   clip range
                       0.2
   entropy_loss
                       | -0.864
   explained variance
                     | 0.18
   learning_rate
                       | 1e-06
                        184
   n_updates
                       3730
   policy_gradient_loss | 3.55e-05
   value loss
   ep_len_mean
                       | 4.45e+03
   ep_rew_mean
                       | 1.6e+03
time/
```

```
fps
                      | 122
                      | 375
   iterations
   time_elapsed
                      1570
   total_timesteps
                      192000
train/
   approx_kl
                      0.0021001226
   clip fraction
                      0.2
   clip_range
   entropy_loss
                      -0.857
   explained_variance | 0.365
   learning_rate
                      | 1e-06
   loss
                      1 156
                      | 3740
   n updates
   policy_gradient_loss | -0.00215
   value loss
rollout/
   ep len mean
                      4.37e+03
   ep_rew_mean
                      | 1.58e+03
time/
  fps
                      | 122
   iterations
                      | 376
                     | 1574
   time_elapsed
                    192512
  total_timesteps
train/
                      | 0.0059887664
  approx kl
   clip_fraction
                      0.06
   clip range
                     0.2
                      | -0.823
   entropy_loss
   explained variance | 0.617
   learning_rate
                      l 1e-06
                      | 42.3
   n updates
                      3750
   policy gradient loss | -0.00612
                      | 111
   value_loss
rollout/
                      | 4.37e+03
   ep_len_mean
  ep_rew_mean
                     | 1.58e+03
time/
                      | 122
                      | 377
  iterations
                     | 1578
  time_elapsed
  total_timesteps
                    | 193024
train/
                      0 00386429
  approx kl
   clip_fraction
                      0.2
   clip_range
   entropy_loss
                      | -0.858
   explained_variance | 0.375
   learning_rate
                      | 1e-06
   loss
                      | 470
                      | 3760
   n updates
   policy_gradient_loss | -0.00253
   value_loss
                      | 660
rollout/
                      | 4.3e+03
   ep_len_mean
  ep rew mean
                      | 1.59e+03
time/
                      122
  iterations
                      | 378
                    | 1582
   time elapsed
   total_timesteps
                      | 193536
train/
                      | 0.0011056293
  approx_kl
   clip_fraction
   clip_range
                      0.2
   entropy_loss
   explained_variance | 0.859
   learning rate
                      l 1e-06
                      53.9
   loss
   n updates
   policy_gradient_loss | 6e-05
rollout/
  ep len mean
                      | 4.3e+03
                      | 1.59e+03
   ep_rew_mean
```

```
time/
                        122
   fps
   iterations
                        379
                       | 1586
   time_elapsed
                       194048
   total_timesteps
train/
                        0.0007013214
   approx kl
   clip_fraction
                      | 0.000195
   clip_range
                      0.2
   entropy_loss
                      | -0.943
   explained_variance | 0.223
   learning_rate
                      | 1e-06
   loss
                      | 3780
   n_updates
   policy_gradient_loss | -0.000331
   value_loss | 814
rollout/
   ep_len_mean
                        4.22e+03
                      | 1.58e+03
  ep_rew_mean
time/
                      | 122
  fps
                      | 380
  iterations
                     | 1591
   time elapsed
  total_timesteps
                     194560
train/
                      | 0.00083968625
  approx_kl
   clip fraction
                      0.000586
  clip_range
                      0.2
   entropy_loss
                      | -0.909
   explained_variance | 0.66
   learning_rate
                      | 1e-06
   loss
                       1 53.6
                       3790
   n updates
   policy_gradient_loss | -0.00154
   value loss
  ep_len_mean
                      | 4.14e+03
  ep_rew_mean
                      | 1.58e+03
time/
  fps
                       i 122
  iterations
                      | 381
                     | 1595
   time elapsed
   total_timesteps
                      | 195072
train/
                      0.00066237967
   approx kl
                      0.00137
   clip_fraction
   clip_range
                      0.2
                      | -0.923
   entropy_loss
   explained_variance | 0.416
                     | 1e-06
   learning_rate
                       | 240
   loss
                      3800
   n updates
   policy_gradient_loss | -0.00192
   value_loss
                      | 438
rollout/
                     | 4.14e+03
   ep len mean
   ep rew mean
                      | 1.58e+03
time/
                      | 122
  fps
                     | 382
   iterations
                      | 1599
   time_elapsed
  {\tt total\_timesteps}
                      | 195584
train/
   approx kl
                      | 0.010376701
                      | 0.0287
   clip_fraction
   clip range
                      0.2
   entropy_loss
                      | -0.852
   explained variance | 0.301
                       l 1e-06
   learning_rate
   loss
                      | 200
                      | 3810
   n updates
   policy gradient loss | -0.00714
   value_loss
rollout/
                      | 4.08e+03
  ep_len_mean
```

```
ep rew mean
                        | 1.58e+03
 time/
                         122
    fps
                        | 383
    iterations
                       | 1603
    time elapsed
                       196096
    total_timesteps
                        0.00097399915
    approx_kl
    clip fraction
    clip_range
entropy_loss
                      | 0.2
                       | -0.833
    explained_variance | 0.34
    learning_rate
                       | 1e-06
                        | 80.7
    loss
    n updates
                        3820
    policy_gradient_loss | -0.0024
    value loss
 rollout/
    ep len mean
                        | 4.08e+03
                        | 1.58e+03
    ep_rew_mean
 time/
                        1 122
                       | 384
    iterations
    time_elapsed
                     | 1607
| 196608
    total timesteps
 train/
    approx kl
                       0.00038638117
                      | 0
    clip_fraction
                      | 0.2
| -0.861
    clip_range
entropy_loss
    explained variance | 0.543
    learning_rate | 1e-06
    loss
                       | 119
                        3830
    n_updates
    policy_gradient_loss | 6.79e-05
                | 519
    value_loss
 rollout/
                     4.02e+03
    ep len mean
    ep rew mean
                       | 1.59e+03
 time/
                       | 122
    fps
                     | 385
| 1611
| 197120
    iterations
    time_elapsed
    total_timesteps
 train/
                       0.0013418393
    approx kl
    clip_fraction
                       0.2
    clip range
                       | -0.902
    entropy_loss
    explained_variance | 0.917
    learning_rate | 1e-06
                        27.8
                      | 3840
    n_updates
    policy_gradient_loss | 0.00113
    value_loss | 86.1
 rollout/
                     4.02e+03
1.59e+03
    ep len mean
    ep rew mean
 time/
   fps
                       | 122
                       | 386
    iterations
                      | 1615
| 197632
    time elapsed
    total_timesteps
 train/
                       | 0.0021200688
    approx_kl
    clip fraction
                      | 0.2
    clip_range
    entropy loss
                        | -0.896
    explained_variance | 0.307
                       | 1e-06
    learning_rate
                        | 189
    loss
    n_updates
                        3850
    policy_gradient_loss | -0.00295
    value_loss | 849
| rollout/
```

```
ep len mean
                      | 4.02e+03
                      | 1.59e+03
   ep_rew_mean
time/
                      i 122
  fps
                      387
   iterations
                      | 1620
   time_elapsed
  total timesteps
                      198144
train/
  approx kl
                      0.0005375126
   clip_fraction
   clip_range
                      0.2
                      | -0.909
   entropy_loss
   explained variance | 0.219
   learning_rate
                      | 1e-06
                      | 116
   loss
                      I 3860
   n_updates
   policy gradient loss | -0.000685
   value_loss | 215
rollout/
                      | 3.97e+03
   ep_len_mean
  ep_rew_mean
                    | 1.61e+03
time/
                      | 122
                     | 388
   iterations
                    1624
   time_elapsed
                      | 198656
   total_timesteps
train/
                      0.0009561565
  approx_kl
   clip_fraction
   clip_range
                      0.2
   entropy loss
                      | -0.941
   explained_variance | 0.658
   learning_rate | 1e-06
                      | 59.3
   loss
   n updates
                      | 3870
   policy_gradient_loss | -0.00149
   value_loss | 155
rollout/
   ep len mean
                      | 3.9e+03
  ep_rew_mean
                      | 1.6e+03
time/
  fps
                       122
  iterations
                      | 389
   time elapsed
                     | 1628
  total_timesteps
                     | 199168
train/
                      | 0.0009730336
  approx_kl
   clip_fraction
   clip_range
                      0.2
                      | -0.946
   entropy_loss
   explained_variance | 0.604
                      le-06
   learning_rate
                      | 218
   loss
   n updates
                      3880
   policy_gradient_loss | -0.000646
   value loss
rollout/
  ep len mean
                     3.9e+03
                     | 1.6e+03
  ep_rew_mean
time/
                      | 122
  fps
   iterations
   time_elapsed
                       1632
   total_timesteps
                      | 199680
train/
   approx kl
                      0.006044994
   clip_fraction
                     | 0
                      0.2
   clip range
                      | -0.866
   entropy_loss
   explained variance | 0.279
                      | 1e-06
   learning_rate
   loss
                      | 53.1
   n_updates
                      3890
   policy_gradient_loss | -0.00445
                      | 625
   value_loss
```

```
rollout/
                       3.85e+03
  ep len mean
  ep rew mean
                      1.6e+03
time/
  fps
                      | 122
                      | 391
  iterations
  time elapsed
                       1637
  total_timesteps
                      | 200192
                      | 0.0006007507
  approx_kl
  clip_fraction
                      | 0.2
  clip_range
  entropy loss
                      | -0.938
  explained variance | 0.639
  learning rate
                      l 1e-06
                      i 137
  loss
  n updates
                      3900
  policy_gradient_loss | -0.000217
  value loss | 328
rollout/
  ep len mean
                     | 3.85e+03
                      | 1.6e+03
  ep_rew_mean
time/
                      | 122
  fps
                     | 392
  iterations
  time_elapsed
                      | 1641
  total_timesteps
                      | 200704
train/
                      0.002170837
  approx_kl
  clip_fraction
                     0.2
  clip_range
                     | -0.87
  entropy_loss
  explained variance | 0.415
                      l 1e-06
  learning_rate
                      | 113
  n_updates
                     | 3910
  policy_gradient_loss | -0.00205
  value_loss
                      | 541
rollout/
                      3.85e+03
  ep len mean
  ep rew mean
                      | 1.6e+03
time/
                      | 122
  fps
  iterations
  time_elapsed
                    | 1646
  total_timesteps
                     | 201216
train/
                      | 0.0014748746
  approx kl
                     0.00645
  clip_fraction
  clip_range
                      0.2
  entropy_loss
                      | -0.892
  explained variance | 0.763
                      | 1e-06
  learning_rate
  loss
                      | 67.4
                      3920
  n_updates
  policy_gradient_loss | -0.0013
```

| 3.8e+03 ep_len_mean ep_rew_mean 1.62e+03 time/ fps 394 iterations time elapsed 1650 total_timesteps | 201728 | 0.000668464 approx_kl clip fraction clip_range | 0.2 entropy loss -0.913 0 952 explained_variance learning_rate | 1e-06 34.7 n updates 3930

policy_gradient_loss | 0.00119
value loss | 102

value_loss

```
rollout/
                        3.8e+03
  ep len mean
   ep rew mean
                      | 1.62e+03
time/
                      | 122
  fps
                        395
   iterations
   time elapsed
                      | 1654
  total_timesteps
                      202240
train/
  approx kl
                      | 0.0021981995
   clip_fraction
  clip_range
                      0.2
   entropy_loss
                        -0.911
   explained variance
                      0.45
                      | 1e-06
  learning_rate
                      3940
   n_updates
   policy_gradient_loss | -0.0017
                     | 697
   value_loss
rollout/
                        3.8e+03
   ep_len_mean
  ep_rew_mean
                      | 1.62e+03
time/
                      | 122
                      | 396
  iterations
  time elapsed
                     1658
                     | 202752
  total_timesteps
                      0.0005757172
  approx_kl
   clip_fraction
                      0.00117
   clip_range
                      0.2
   entropy loss
                      | -0.97
   explained_variance | 0.911
   learning_rate
                      | 1e-06
                      | 49
  loss
   n_updates
                      3950
   policy_gradient_loss | 9.63e-05
   value_loss | 145
rollout/
                      | 3.8e+03
   ep len mean
  ep_rew_mean
                      | 1.62e+03
time/
  fps
                      122
  iterations
                      | 397
                    | 1663
   time_elapsed
   total_timesteps
                      | 203264
train/
                      | 0.0011786444
  approx_kl
   clip fraction
                      0.2
   clip_range
   entropy loss
                      -0.92
   explained_variance | 0.744
   learning_rate
                      | 1e-06
   loss
                      143
   n updates
                      3960
   policy_gradient_loss | -0.000149
   value loss
                      | 287
rollout/
                     | 3.76e+03
  ep_len_mean
                      | 1.64e+03
  ep_rew_mean
time/
  fps
                        122
   iterations
   time_elapsed
                      | 1667
   total_timesteps
                      | 203776
train/
  approx kl
                      0.0003370134
   clip_fraction
   clip range
                      0.2
   entropy_loss
                      | -0.919
   explained variance
                      0.489
   learning_rate
                      | 1e-06
   loss
   n_updates
                        3970
   policy_gradient_loss | -0.000545
   value_loss
                      | 303
```

rollout/ ep_len_mean | 3.71e+03 ep_rew_mean | 1.63e+03 time/ 1 122 fps | 399 iterations time elapsed 1671 total_timesteps | 204288 train/ 0.007749214 approx_kl 0.0084 clip fraction clip_range
entropy_loss 0.2 entropy_loss | -0.899 explained_variance | 0.77 learning_rate l 1e-06 loss | 71.1 n updates 3980 policy_gradient_loss | -0.00375 value loss | 208 rollout/ ep_len_mean ep_rew_mean | 3.65e+03 1.62e+03 time/ | 122 fps iterations | 400 time_elapsed | 1675 total timesteps 204800 train/ 0.0001729338 approx_kl clip_fraction | 0 0.2 clip range | -0.899 entropy_loss explained variance | 0.158 le-06 learning_rate loss | 258

policy_gradient_loss | -0.000684
value_loss | 792

3990

n_updates

rollout/ | 3.65e+03 ep len mean 1.62e+03 ep_rew_mean time/ | 122 fps | 401 iterations time_elapsed | 1680 total_timesteps | 205312 train/ 0.0018778215 approx kl clip_fraction 0.0043 clip range 0.2 -0.966 entropy_loss explained_variance | 0.71 learning_rate | 1e-06 loss | 4000 n_updates policy_gradient_loss | -0.00149 value_loss | 484

ı	rollout/	1 1
i	ep len mean	3.6e+03
i	ep rew mean	1.63e+03
i	time/	i
i	fps	i 122
i	iterations	i 402 i
İ	time elapsed	1684
İ	total timesteps	205824
İ	train/	i i
İ	approx_kl	0.0015672009
	clip_fraction	0
	clip_range	0.2
	entropy_loss	-0.931
	<pre>explained_variance</pre>	0.773
	learning_rate	1e-06
	loss	119
	n_updates	4010
	<pre>policy_gradient_loss</pre>	-7.58e-05

value loss	223
vatue_toss	
rollout/	
<pre> ep_len_mean ep rew mean</pre>	3.6e+03 1.63e+03
ep_rew_mean time/	1.03e+03
fps	122
iterations	403
time_elapsed	1688
total_timesteps	206336
train/	 0.0011046535
approx_kl clip fraction	0.0011040333 0.00293
clip range	0.2
entropy_loss	-0.936
<pre> explained_variance</pre>	0.224
learning_rate	1e-06
loss	193
<pre> n_updates policy_gradient_loss</pre>	4020 -0.00309
value_loss	824
1 1010_100	
rollout/	
ep_len_mean	3.6e+03
ep_rew_mean time/	1.63e+03
fps	
iterations	1 404
time elapsed	1692
total_timesteps	206848
train/	
approx_kl	0.011127851
clip_fraction	0.0705 0.2
<pre> clip_range entropy_loss</pre>	0.2
explained variance	1 0.65
learning rate	l 1e-06
loss	90.2
n_updates	4030
	-0.00819
value_loss	179
rollout/	1
ep_len_mean	3.57e+03
ep_rew_mean	1.65e+03
time/	
fps iterations	122 405
time elapsed	1696
total timesteps	207360
train/	j j
approx_kl	0.003664055
clip_fraction	0
clip_range	0.2
<pre> entropy_loss explained variance</pre>	-0.968 0.749
learning rate	1e-06
loss	106
n_updates	4040
' ',_3 _	-0.00319
value_loss	201
rollout/	
ep_len_mean	3.57e+03
ep_rew_mean	1.65e+03
time/	
fps	122
<pre> iterations time elapsed</pre>	406 1701
total timesteps	1701
train/	
approx_kl	0.00019287039
clip_fraction	j 0 j
clip_range	0.2
entropy_loss	-0.932
<pre> explained_variance learning rate</pre>	0.568 1e-06
tearning_rate loss	1e-06 98.4
n_updates	4050

```
policy_gradient_loss | 0.000175
   value_loss | 729
                      | 3.53e+03
   ep_len_mean
  ep_rew_mean
                    | 1.66e+03
time/
                     122
  fps
                     | 407
  iterations
   time elapsed
                       1705
                     | 208384
   total_timesteps
train/
                     0.0015421412
  approx_kl
   clip fraction
   clip range
                     0.2
  entropy_loss
                     | -0.897
   explained variance | 0.725
   learning_rate
                     le-06
                      | 49.7
   loss
   n updates
                      | 4060
   policy_gradient_loss | -0.0018
   value_loss | 142
rollout/
  ep len mean
  ep_rew_mean
                     | 1.66e+03
time/
                      | 122
  fps
   iterations
                     | 408
                     | 1709
  time elapsed
                    208896
   total timesteps
train/
  approx kl
                     | 0.0014919088
   clip_fraction
   clip range
                     | 0.2
                     | -0.919
   entropy_loss
   explained_variance | 0.0909
                     | 1e-06
   learning_rate
   loss
                      | 425
   n updates
                     | 4070
   policy gradient loss | -0.00252
                 | 939
   value loss
  ep_len_mean
                     | 3.49e+03
  ep_rew_mean
                    | 1.66e+03
time/
  fps
                      | 122
  iterations
                    | 1713
   time_elapsed
                     | 209408
  total_timesteps
train/
                     0.0012809118
  approx kl
   clip_fraction
                    | 0
                    | 0.2
   clip_range
   entropy_loss
                     | -0.858
   explained variance | 0.181
   learning_rate
                     | 1e-06
                      66.1
   loss
   n_updates
                      | 4080
   policy gradient loss | -0.000585
                      | 113
   value loss
rollout/
                     | 3.49e+03
   ep_len_mean
   ep_rew_mean
                     | 1.66e+03
time/
                     | 122
                    | 410
   iterations
   time_elapsed
                       1718
```

total_timesteps

approx_kl
clip_fraction

clip_range

entropy loss

explained_variance
learning_rate

train/

loss

| 209920

0.000977

| -0.929 | 0.623

| 1e-06 | 434

0.2

0.00068078004

n_updates	4090
policy_gradient_loss	
value_loss	750
rollout/	 I I
ep_len_mean	3.49e+03
ep_rew_mean	1.66e+03
time/	
fps	122
<pre> iterations time_elapsed</pre>	411 1723
total timesteps	210432
train/	j j
approx_kl	0.0013977325
clip_fraction	0
<pre> clip_range entropy_loss</pre>	0.2 -0.931
explained variance	0.9
learning_rate	1e-06
loss	60.6
<pre> n_updates policy_gradient_loss</pre>	4100
	145
1 14145_1000	
rollout/	
<pre> ep_len_mean ep rew mean</pre>	3.45e+03 1.65e+03
ep_rew_mean time/	1.05e+05
fps	122
iterations	412
time_elapsed	1727
<pre> total_timesteps train/</pre>	210944
approx kl	
clip_fraction	0.00762
clip_range	0.2
entropy_loss	-0.979
<pre> explained_variance learning rate</pre>	0.445 1e-06
loss	8.45
n_updates	4110
<pre>policy_gradient_loss</pre>	-0.00287
value_loss	67.6
rollout/	1
ep_len_mean	3.45e+03
ep_rew_mean	1.65e+03
time/ fps	 122
iterations	413
time_elapsed	1731
total_timesteps	211456
train/	
<pre> approx_kl clip_fraction</pre>	0.0011516048 0
clip_range	0.2
entropy_loss	-0.891
	0.356
learning_rate	1e-06 330
loss n updates	330 4120
	-0.00129
value_loss	696
rollout/	I I
ep_len_mean	I 3.42e+03 I
ep_rew_mean	1.66e+03
time/	
fps	122
<pre> iterations time elapsed</pre>	414 1735
total_timesteps	211968
train/	i i
approx_kl	0.0030161445
clip_fraction	0
<pre> clip_range entropy_loss</pre>	0.2 -0.9
explained variance	0.879
learning_rate	l 1e-06

loss	76.9
n_updates	4130
<pre>policy_gradient_loss value_loss</pre>	-0.00305
Vacue_coss	
rollout/	
<pre> ep_len_mean ep_rew_mean</pre>	3.42e+03 1.66e+03
time/	1.000.05
fps	122
iterations	415
time_elapsed	1739 212480
<pre> total_timesteps train/</pre>	212400
approx kl	0.0013990717
clip_fraction	0.00918
clip_range	0.2
<pre> entropy_loss explained variance </pre>	-0.9 0.613
learning rate	1e-06
loss	380
n_updates	4140
	0.000361
value_loss	866
rollout/	
ep_len_mean	3.38e+03
ep_rew_mean time/	1.66e+03
fps	
iterations	416
time_elapsed	1744
total_timesteps	212992
train/ approx kl	
clip_fraction	0.0045401500
clip_range	0.2
entropy_loss	-0.89
explained_variance	0.654
learning_rate loss	1e-06 86.4
n updates	4150
policy_gradient_loss	-0.00353
value_loss	153
rollout/	
ep_len_mean	3.38e+03
ep_rew_mean	1.66e+03
time/ fps	
iterations	417
time_elapsed	1748
total_timesteps	213504
train/ approx kl	 0.0008144673
clip fraction	0.0000144075
clip_range	0.2
entropy_loss	-0.888
• • •	0.707
<pre> learning_rate loss</pre>	1e-06 346
n_updates	4160
policy_gradient_loss	0.00022
value_loss	697
rollout/	
ep_len_mean	3.34e+03
ep_rew_mean	1.66e+03
time/ fps	
iterations	418
time_elapsed	1752
total_timesteps	214016
train/	
approx_kl clip_fraction	0.00087965094 0.000391
	0.2
entropy_loss	-0.885
<pre> explained_variance </pre>	0.645

learning rate	1e-06
loss	57.7
	4170
<pre>policy_gradient_loss value loss</pre>	-1.6e-05
vacue_coss	130
rollout/	 3.3e+03
ep_len_mean ep rew mean	1.65e+03
time/	
fps	122
iterations	419
<pre> time_elapsed total timesteps</pre>	1756 214528
train/	214326
approx kl	0.0012026116
clip_fraction	0.00859
clip_range	0.2
	-1.02 0.757
learning rate	1e-06
loss	498
	4180
policy_gradient_loss	
value_loss	511
rollout/	
ep_len_mean	3.3e+03
ep_rew_mean	1.65e+03
time/ fps	
iterations	420
time elapsed	1760
total_timesteps	215040
train/	
approx_kl	7.603539e-05 0
<pre> clip_fraction clip range</pre>	0.2
entropy_loss	-0.934
	0.324
learning_rate	1e-06
loss n updates	91 4190
n_upuates policy_gradient_loss	
value_loss	607
mallant/	
rollout/ ep len mean	
ep_ten_mean	1.65e+03
time/	
fps	122
iterations	421
<pre> time_elapsed total timesteps</pre>	1764 215552
train/	
approx_kl	0.0011829848
clip_fraction	0
clip_range	0.2 -0.954
<pre> entropy_loss explained_variance</pre>	0.73
	1e-06
loss	51.4
n_updates	4200
<pre>policy_gradient_loss value loss</pre>	-0.000827 125
value_toss	125
rollout/	
ep_len_mean	3.26e+03
ep_rew_mean time/	1.65e+03
fps	122
iterations	422
time_elapsed	1769
total_timesteps	216064
train/	 0.00021127996
approx_kl clip fraction	0.00021127996 0
clip_range	0.2
entropy_loss	-0.973

```
explained variance
                     0.452
   learning_rate
                       | 1e-06
                       | 435
   loss
                      | 4210
   n_updates
   policy_gradient_loss | -0.000772
   value loss
                        3.26e+03
   ep_len_mean
                      | 1.65e+03
  ep_rew_mean
time/
  fps
                      | 122
                      | 423
   iterations
   time elapsed
                      1773
  total timesteps
                      | 216576
                      0.0062278532
  approx_kl
  clip fraction
                      0.0131
   clip_range
                      0.2
                       | -0.964
   entropy_loss
   explained_variance | 0.831
                      | 1e-06
   learning_rate
                       1 101
   n updates
                      | 4220
   policy_gradient_loss | -0.00422
   value loss | 238
rollout/
   ep len mean
                      | 3.24e+03
                      | 1.66e+03
  ep_rew_mean
                      | 122
  fps
                      | 424
   iterations
                      | 1777
   time elapsed
  total_timesteps
                      | 217088
train/
   approx_kl
                      | 0.0009867927
   clip_fraction
                      0.2
   clip_range
                      | -0.941
   entropy_loss
   explained_variance | 0.626
                      l 1e-06
   learning_rate
                       | 133
   n updates
                       | 4230
   policy_gradient_loss | -0.00148
   value loss
                      | 263
rollout/
                       | 3.24e+03
  ep_len_mean
   ep_rew_mean
                      | 1.66e+03
time/
                      | 122
  fps
  iterations
   time_elapsed
                     | 1781
  total_timesteps
                      | 217600
train/
                      0.005070706
  approx kl
                      | 0
   clip_fraction
   clip range
                      0.2
   entropy_loss
                      | -0.937
   explained variance | 0.531
                      | 1e-06
   learning_rate
   loss
                       | 148
                       | 4240
   n_updates
   policy_gradient_loss | -0.00363
   value_loss
                      | 3.2e+03
  ep len mean
                      | 1.66e+03
  ep rew mean
time/
                      | 122
  fps
                      | 426
   iterations
   time elapsed
                      | 1785
   total_timesteps
                      | 218112
                       | 0.0031437948
   approx_kl
   clip_fraction
                       0.00547
   clip_range
                       0.2
```

l ontrony loss	l -0.867 l
<pre> entropy_loss explained variance</pre>	0.652
learning_rate	le-06
loss	126
<pre> n_updates policy_gradient_loss</pre>	4250 -0.00156
value_loss	257
rollout/	
ep_len_mean	3.16e+03
ep_rew_mean	1.66e+03
time/ fps	
iterations	427
time_elapsed	1789
<pre> total_timesteps train/</pre>	218624
approx_kl	0.00030864915
clip_fraction	0
<pre> clip_range entropy_loss</pre>	0.2 -0.879
explained variance	0.59
learning_rate	l 1e-06
loss	409
<pre> n_updates policy_gradient_loss</pre>	4260 0.000209
	643
rollout/	
ep_len_mean	3.16e+03
ep_rew_mean time/	1.66e+03
fps	
iterations	428
time_elapsed	1794
<pre> total_timesteps train/</pre>	219136
approx_kl	0.0008738269
clip_fraction	0
clip_range entropy_loss	0.2 -0.815
explained variance	0.343
learning_rate	1e-06
loss n updates	189 4270
policy_gradient_loss	-0.00122
value_loss	715
rollout/	l I
ep_len_mean	3.14e+03
ep_rew_mean time/	1.66e+03
fps	122
iterations	429
<pre> time_elapsed total timesteps</pre>	1798 219648
train/	
approx_kl	0.006188956
<pre> clip_fraction clip range</pre>	0.00781 0.2
entropy_loss	-0.835
explained_variance	0.79
learning_rate loss	1e-06 59.1
n updates	4280
policy_gradient_loss	
value_loss	162
rollout/	
<pre> ep_len_mean ep_rew_mean</pre>	3.14e+03 1.66e+03
time/	
fps	122
<pre> iterations time elapsed</pre>	430 1803
total timesteps	220160
train/	i i
approx_kl clip fraction	0.000938258 0
I CCTP_LLGCCTOH	1 0

explained_variance learning_rate loss n_updates	0.2 -0.785 0.713 1e-06 291 4290 -0.000529 480
rollout/ ep_len_mean ep_rew_mean	3.11e+03 1.66e+03
time/ fps iterations time_elapsed total_timesteps train/	122 431 1807 220672
approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates	0.0006686165 0
rollout/ ep_len_mean ep_rew_mean	3.11e+03 1.66e+03
time/ fps iterations time_elapsed total_timesteps	122 432 1811 221184
loss	0.001365103 0.000195 0.2 -0.852 0.689 1e-06 91.2 4310 -0.000996 454
rollout/ ep_len_mean	
<pre> ep_rew_mean time/ fps iterations time elapsed</pre>	1.67e+03
total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates	221696
rollout/ ep_len_mean ep rew mean	 3.08e+03 1.67e+03
time/ fps iterations time_elapsed total_timesteps train/ approx_kl	122

clip_fraction	0.000391
1 _ 3	0.2 -0.87
	0.558
	l 1e-06
loss	335
	4330
<pre>policy_gradient_loss value loss</pre>	0.00049 666
vatue_toss	
rollout/	
ep_len_mean ep rew mean	3.04e+03 1.66e+03
time/	1.00c105
fps	122
iterations	435
_ ·	1824
<pre>total_timesteps train/</pre>	222720
approx kl	0.0029156082
	0.0115
	0.2
	-0.811 0.865
• =	0.865 1e-06
	62.5
n updates	4340
policy_gradient_loss	
value_loss	144
rollout/	
'	3.04e+03 1.66e+03
ep_rew_mean time/	1.00e+03
fps	122
iterations	436
	1828
total_timesteps	223232
train/ approx kl	 0.0009862352
	0.0041
clip_range	0.2
entropy_loss	-0.876
	0.577 1e-06
loss	228
n_updates	4350
. ,	-0.00122
value_loss	723
rollout/	
ep_len_mean ep rew mean	3.02e+03 1.67e+03
time/	1.076±03
fps	122
iterations	437
time_elapsed	1832
<pre>total_timesteps train/</pre>	223744
approx kl	 0.0012709035
clip_fraction	0
clip_range	0.2
	-0.857
	0.793 1e-06
	62.9
n updates	4360
policy_gradient_loss	
value_loss	165
rollout/	
ep_len_mean	2.99e+03
ep_rew_mean	1.66e+03
time/	
fns	144
fps iterations	438
iterations time_elapsed	438 1837
iterations	'

```
approx_kl
                      | 0.006686597
   clip_fraction
                      0.00215
  clip_range
entropy_loss
                     | 0.2
                      | -0.895
   explained variance | 0.707
   learning_rate
                     | 1e-06
   loss
                      | 258
                     | 4370
   n updates
   policy_gradient_loss | -0.00679
   value_loss
                      | 515
rollout/
                     | 2.99e+03
   ep len mean
                     | 1.66e+03
  ep rew mean
time/
                     | 439
  iterations
  time_elapsed
                     | 1841
  total_timesteps
                      | 224768
train/
                     | 7.905241e-05
  approx_kl
                     | 0
   clip_fraction
                      0.2
   clip_range
   entropy loss
                     | -0.884
   explained_variance | 0.583
   learning_rate | 1e-06
                      | 250
   loss
   n updates
                      4380
   policy_gradient_loss | -7.5e-05
rollout/
  ep len mean
                      | 2.96e+03
  ep_rew_mean
                      | 1.65e+03
time/
                      | 122
  fps
   iterations
                     | 440
                     1845
  time_elapsed
                    225280
  total_timesteps
train/
  approx_kl
                      0.0035246296
   clip_fraction
   clip_range
                     | 0.2
                      | -0.882
   entropy_loss
   explained_variance | 0.866
   learning_rate
                      l 1e-06
                      | 60
   loss
   n updates
                      | 4390
   policy_gradient_loss | -0.0017
   value_loss | 129
rollout/
  ep_len_mean
                     | 2.96e+03
  ep_rew_mean
                    | 1.65e+03
time/
                      | 122
  fps
  iterations
                    | 1849
  time_elapsed
  total timesteps
                    225792
train/
  approx kl
                      0.0007544847
   clip_fraction
                     | 0
                     | 0.2
   clip_range
   entropy_loss
                      | -0.894
   explained_variance | 0.681
   learning_rate
                      | 1e-06
   loss
                      | 124
   n_updates
   policy_gradient_loss | -0.000235
                      | 778
   value_loss
rollout/
                    | 2.93e+03
  ep_len_mean
  ep_rew_mean
                     | 1.65e+03
time/
                      | 122
                      | 442
   iterations
   time elapsed
                      | 1853
   total_timesteps
                      | 226304
```

```
train/
                       0.009561457
   approx_kl
   clip fraction
                       0.0297
   clip_range
                       0.2
                       1 -0.894
   entropy_loss
   explained_variance | 0.84
                       i 1e-06
   learning_rate
                       | 38.8
                       4410
   n updates
   policy_gradient_loss | -0.0049
   value_loss | 134
rollout/
                        2.91e+03
   ep len mean
                       | 1.65e+03
   ep rew mean
time/
                        122
  fps
   iterations
                       | 443
                       | 1858
   time_elapsed
   total_timesteps
                       | 226816
train/
                       0.0012094446
   approx kl
   clip_fraction
                       0.00762
   clip range
                       0.2
                       | -0.963
   entropy_loss
   explained variance | 0.723
   learning_rate
                       | 1e-06
                       71.9
   loss
                       | 4420
   n_updates
   policy_gradient_loss | -0.00334
   value_loss
                       | 508
rollout/
                       | 2.91e+03
   ep_len_mean
   ep_rew_mean
                      | 1.65e+03
time/
  fps
                       | 122
   iterations
                     | 1862
   time_elapsed
   total_timesteps
                       | 227328
train/
                       0.0018708933
  approx kl
   clip fraction
                       | 0.000391
   clip_range
                       0.2
   entropy_loss
                       | -0.942
   explained variance | 0.408
   learning_rate
                       | 1e-06
                       | 200
   loss
   n_updates
                       | 4430
   policy_gradient_loss | -4.16e-05
   value loss
                      | 2.88e+03
   ep_len_mean
   ep_rew_mean
                       | 1.65e+03
time/
  fps
                       | 122
                       | 445
   iterations
   time elapsed
                        1866
   total timesteps
                       | 227840
train/
                       | 0.0065403935
   approx_kl
                       0.00586
   clip_fraction
                       0.2
   clip_range
   entropy_loss
                       | -0.944
   explained_variance
                       | 0.9
                        1e-06
   learning_rate
   loss
                        76
   n updates
                       | 4440
   policy_gradient_loss | -0.00535
   value loss
                        162
rollout/
   ep len mean
                       | 2.88e+03
   ep_rew_mean
                       | 1.65e+03
time/
                       | 122
   fps
   iterations
                        446
                       1870
   time_elapsed
```

```
{\tt total\_timesteps}
                      | 228352
train/
  approx kl
                      0.0011505923
   clip_fraction
                      | 0
                      0.2
   clip range
                      | -0.929
   entropy_loss
   explained variance | 0.661
                      | 1e-06
   learning_rate
   loss
   n_updates
                      | 4450
   policy_gradient_loss | -0.000527
   value_loss
              | 665
rollout/
                      | 2.86e+03
  ep len mean
  ep_rew_mean
                     i 1.65e+03
time/
  fps
                      | 447
  iterations
   time elapsed
                     | 1874
  total_timesteps
                     | 228864
train/
  approx_kl
                      0.0024354532
   clip fraction
  clip_range
entropy_loss
                     | 0.2
                      | -0.874
   explained_variance | 0.687
   learning_rate
                      le-06
                      | 47
   loss
   n_updates
                      | 4460
   policy_gradient_loss | -0.00144
   value loss
rollout/
  ep len mean
                      | 2.86e+03
                      | 1.65e+03
  ep_rew_mean
time/
                      | 122
                     | 448
   iterations
  time_elapsed
                    | 1879
   total timesteps
                      | 229376
train/
                      0.0016647214
   approx kl
   clip_fraction
                      0.2
   clip_range
   entropy_loss
                      | -0.897
   explained_variance | 0.617
   learning_rate
                      | 1e-06
                      | 291
   n updates
                      | 4470
   policy_gradient_loss | 0.000467
   value loss
                      | 637
rollout/
                    | 2.83e+03
  ep len mean
   ep_rew_mean
                      | 1.65e+03
time/
                      | 122
  fps
   iterations
                      449
                     | 1883
   time_elapsed
  total timesteps
train/
  approx kl
                      | 0.0017746188
   clip_fraction
   clip range
                      0.2
                      | -0.868
   entropy_loss
   explained_variance | 0.542
                      | 1e-06
   learning_rate
                      | 79.1
                      | 4480
   n_updates
   policy_gradient_loss | -0.00111
   value_loss
                      | 216
rollout/
                      | 2.81e+03
  ep_len_mean
  ep_rew_mean
time/
                      | 121
  fps
  iterations
                      | 450
```

```
time elapsed
                      | 1888
                        230400
  total_timesteps
train/
                      0.0055806036
  approx_kl
                      | 0.00781
  clip fraction
  clip_range
                      0.2
                      i -0.868
  entropy loss
  explained_variance | 0.0597
                      l 1e-06
  learning_rate
  loss
                      | 357
                      | 4490
  n updates
  policy_gradient_loss | -0.0031
  value loss
rollout/
  ep len mean
                      1.65e+03
  ep rew mean
time/
                      | 121
  fps
  iterations
                      | 451
                     | 1892
  time_elapsed
  total_timesteps
                     | 230912
train/
  approx kl
                      0.0015806969
  clip_fraction
                      | 0.2
  clip range
  entropy_loss
                      | -0.963
  explained variance | 0.67
                      | 1e-06
  learning_rate
                      | 320
  n_updates
                      1 4500
  policy gradient loss | -0.000611
  value_loss | 754
                     | 2.79e+03
  ep_len_mean
  ep_rew_mean
                     | 1.66e+03
time/
                      | 121
                     | 452
  iterations
                    1896
  time elapsed
  total_timesteps
                      231424
                      0.0098652225
  approx kl
  clip_fraction
                      0.0832
  clip range
                      0.2
                      | -0.913
  entropy_loss
  explained_variance | 0.72
  learning_rate
                      | 1e-06
                      | 41.6
  loss
  n updates
                      | 4510
  policy_gradient_loss | -0.00917
  value_loss
                      | 135
rollout/
                      | 2.79e+03
  ep_len_mean
  ep_rew_mean
                      | 1.66e+03
time/
                      121
  fps
  iterations
                      | 453
  time elapsed
  total timesteps
                     231936
train/
  approx_kl
                      | 0.0011021929
  clip_fraction
                      0.2
  clip_range
  entropy_loss
                      | -0.928
  explained_variance | 0.342
  learning_rate
                      | 1e-06
  loss
                        396
                      4520
  n updates
  policy gradient loss | -0.00158
  value loss
                      | 2.79e+03
  ep len mean
                      | 1.66e+03
  ep_rew_mean
time/
                      | 121
  fps
```

iterations	454
time_elapsed	1905
total_timesteps	232448
train/	
approx_kl	0.0064389557
clip_fraction	0.000781
clip_range	0.2
entropy_loss	-0.95
explained_variance	0.761
learning_rate	1e-06 82
loss	4530
<pre> n_updates policy_gradient_loss </pre>	
value_loss	203
vatac_toss	
rollout/	
ep_len_mean	2.77e+03
ep_rew_mean	1.66e+03
time/	
fps	121
iterations	455
time_elapsed	1909
total_timesteps	232960
train/	
approx_kl	0.0021841847
clip_fraction	0.00156
clip_range	0.2
entropy_loss	-0.867
<pre> explained_variance learning_rate</pre>	0.809
learning_rate loss	1e-06 68.6
n updates	4540
. = .	-0.00109
value loss	159
vatac_toss	
rollout/	
ep_len_mean	2.77e+03
ep_rew_mean	1.66e+03
time/	
fps	121
iterations	456
time_elapsed	1913
total_timesteps	233472
train/ approx kl	 0.0007175036
approx_kt clip fraction	0.00664
clip_range	0.2
entropy_loss	-0.87
explained variance	0.622
learning rate	l 1e-06
loss	159
n updates	4550
policy_gradient_loss	-0.000138
value_loss	777
rollout/	
ep_len_mean	2.75e+03
ep_rew_mean	1.66e+03
time/ fps	
ips iterations	121
time elapsed	1917
total_timesteps	233984
totat_timesteps train/	
approx kl	0.0022222635
clip_fraction	0
clip range	0.2
entropy_loss	-0.92
explained_variance	0.837
learning_rate	le-06
loss	57.2
n_updates	4560
1 1 1 1 1	-0.000743
value_loss	110
L rollout/	
rollout/	
ep_len_mean	2.72e+03
ep_rew_mean time/	1.65e+03
I CTINC/	ı I

```
fps
                      | 121
                      | 458
   iterations
   time_elapsed
                      1922
                      | 234496
   total_timesteps
train/
   approx_kl
                      | 0.0009252154
                     0.00117
   clip fraction
  clip_range
entropy_loss
                      0.2
                      | -0.942
   explained_variance | 0.591
   learning_rate
                    | 1e-06
                      350
   loss
                      | 4570
   n updates
   policy_gradient_loss | -0.000209
   value loss
                      | 715
rollout/
  ep len mean
                      2.72e+03
                      | 1.65e+03
  ep_rew_mean
time/
                      | 121
  fps
   iterations
                     1926
   time elapsed
                    235008
  total timesteps
train/
                      | 0.0007479737
  approx kl
   clip_fraction
   clip range
                     0.2
                      | -0.927
   entropy_loss
   explained_variance | 0.357
  learning_rate
                      le-06
                      | 453
   n updates
                      4580
   policy gradient loss | -0.000782
                      | 704
   value_loss
rollout/
  ep_len_mean
                      | 2.72e+03
  ep_rew_mean
                     | 1.65e+03
time/
                      | 122
                      | 460
  iterations
  time_elapsed
                    | 1930
  total_timesteps
                    235520
train/
                      0.00094914285
  approx kl
                      | 0.00117
   clip_fraction
  clip_range
                     0.2
   entropy_loss
                      | -0.941
   explained_variance | 0.628
   learning_rate
                     | 1e-06
   loss
                      | 69.8
                      | 4590
   n updates
   policy_gradient_loss | -0.000317
   value_loss | 175
rollout/
                     | 2.71e+03
  ep_len_mean
  ep_rew_mean
                     1.66e+03
time/
                      | 121
  iterations
                     | 461
                    | 1934
   time elapsed
   total_timesteps
                      | 236032
train/
                      | 0.0016968428
  approx_kl
   clip fraction
                     | 0.0041
   clip_range
                      0.2
   entropy_loss
                      | -0.961
   explained variance | 0.661
   learning rate
                      le-06
   loss
                      | 64.3
   n_updates
                      | 4600
   policy_gradient_loss | -0.00118
rollout/
  ep len mean
                      | 2.71e+03
                      | 1.66e+03
   ep_rew_mean
```

```
time/
                        122
   fps
   iterations
                        462
                        1938
   time_elapsed
                       1 236544
   total_timesteps
train/
                        0.0002560208
   approx kl
   clip_fraction
   clip_range
                       0.2
   entropy_loss
                       | -0.949
   explained_variance
                     0.396
                       | 1e-06
   learning_rate
                       | 160
   loss
                       | 4610
   n_updates
   policy_gradient_loss | -1.88e-05
   value_loss
                       | 941
rollout/
   ep_len_mean
                        2.71e+03
                      | 1.66e+03
   ep_rew_mean
time/
                       | 122
   fps
   iterations
                       | 463
                     | 1943
   time elapsed
   total_timesteps
                      | 237056
train/
                       | 0.007923108
  approx_kl
   clip fraction
                       0.00977
   clip_range
entropy_loss
                       0.2
                      | -0.953
   explained_variance | 0.856
   learning_rate
                       | 1e-06
   loss
                       1 35.6
   n updates
                       | 4620
   policy_gradient_loss | 0.00104
   value loss
   ep_len_mean
                      | 2.7e+03
  ep_rew_mean
                      | 1.68e+03
time/
  fps
                       i 122
   iterations
                       | 464
                      | 1947
   time elapsed
   total_timesteps
                      | 237568
train/
                      0.00095571624
   approx kl
                      | 0.000391
   clip_fraction
   clip_range
                      0.2
                      | -0.908
   entropy_loss
   explained_variance | 0.775
                     | 1e-06
   learning_rate
                       | 96.4
   loss
                       4630
   n updates
   policy_gradient_loss | -0.00165
   value loss
                       | 173
rollout/
                      2.7e+03
   ep len mean
   ep rew mean
                       | 1.68e+03
time/
                       | 122
   fps
   iterations
                      | 465
                       | 1951
   time_elapsed
   {\tt total\_timesteps}
                       | 238080
train/
   approx kl
                       0.00010404538
   clip_fraction
   clip range
                       0.2
   entropy_loss
                       | -0.917
   explained variance
                      0.475
                       l 1e-06
   learning_rate
   loss
                       | 385
                       | 4640
   n updates
   policy gradient loss | -0.000234
   value_loss
rollout/
                       | 2.7e+03
  ep_len_mean
```

```
ep rew mean
                        | 1.68e+03
 time/
                         122
    fps
                       | 466
    iterations
                       | 1955
    time elapsed
    total_timesteps
                       | 238592
 train/
                       0.0068112356
    approx_kl
    clip_fraction
                      | 0.2
    clip_range
    entropy_loss
                       | -0.914
    explained_variance | 0.873
    learning_rate
                       | 1e-06
                       | 62.6
    loss
    n updates
                       4650
    policy_gradient_loss | -0.00146
    value loss
 rollout/
    ep len mean
                       | 2.68e+03
    ep_rew_mean
                       | 1.68e+03
 time/
                       1 122
    fps
                      | 467
    iterations
                     1959
    time_elapsed
    total timesteps
                       | 239104
 train/
    approx kl
                       0.00014880404
                      | 0
    clip_fraction
    clip_range
entropy_loss
                       | 0.2
                      -0.917
    explained variance | 0.739
    learning_rate
                      | 1e-06
    loss
                       | 122
    n_updates
                       1 4660
    policy_gradient_loss | -6.86e-05
                | 321
    value_loss
 rollout/
                     | 2.66e+03
    ep_len_mean
    ep rew mean
                       | 1.67e+03
 time/
    fps
                       | 122
                       468
    iterations
                     | 1963
| 239616
    time_elapsed
    total timesteps
 train/
                       0.00072188105
    approx_kl
    clip_fraction
                       0.2
    clip range
                       | -0.908
    entropy_loss
    explained variance | 0.479
                       | 1e-06
    learning_rate
                       | 4670
    n_updates
    policy_gradient_loss | -0.000822
    value_loss | 859
 rollout/
                      2.66e+03
1.67e+03
    ep len mean
    ep rew mean
 time/
   fps
                       | 121
                       | 469
    iterations
    time elapsed
                      | 1969
                      | 240128
    total_timesteps
 train/
                       | 0.0022943004
    approx_kl
    clip fraction
                       | 0.2
    clip_range
    entropy loss
                       | -0.953
    explained_variance | 0.636
    learning_rate
                       le-06
                       | 254
    loss
                       | 4680
    n_updates
    policy_gradient_loss | -0.00139
    value loss | 705
| rollout/
```

```
ep len mean
                      | 2.64e+03
                      | 1.68e+03
   ep_rew_mean
time/
                      i 121
  fps
                      1 470
   iterations
   time_elapsed
                      | 1973
  total timesteps
                      | 240640
train/
  approx kl
                      0.0022602635
                      0.00293
   clip_fraction
   clip_range
                      0.2
   entropy_loss
                      | -0.974
   explained variance | 0.634
   learning_rate
                      | 1e-06
                      148
   loss
   n_updates
                      1 4690
   policy gradient loss | 0.000107
   value_loss | 329
rollout/
                      | 2.64e+03
   ep_len_mean
  ep_rew_mean
                     | 1.68e+03
time/
                      | 121
                     | 471
   iterations
                    1977
   time_elapsed
   total_timesteps
                      | 241152
train/
                      0.0005193914
  approx_kl
   clip_fraction
  clip_range
                      0.2
   entropy loss
                      | -0.949
   explained_variance | 0.753
   learning_rate | 1e-06
                      | 226
   loss
   n updates
                      | 4700
   policy_gradient_loss | -0.000303
   value_loss
rollout/
                    2.63e+03
1.68e+03
   ep len mean
  ep_rew_mean
time/
  fps
                      121
                      | 472
  iterations
   time elapsed
  total_timesteps
                     | 241664
train/
                      | 0.0019467
  approx_kl
   clip_fraction
   clip_range
                      0.2
                      | -0.911
   entropy_loss
   explained_variance | 0.869
                      l 1e-06
   learning_rate
                      97.4
   loss
   n updates
                      | 4710
   policy_gradient_loss | -0.000879
   value loss
                      | 150
rollout/
  ep len mean
                     2.63e+03
                     | 1.68e+03
  ep_rew_mean
time/
                      | 121
  fps
   iterations
                     | 1985
   time_elapsed
   total_timesteps
                      | 242176
train/
   approx kl
                      0.0022377
   clip_fraction
                      | 0
   clip range
                      0.2
   entropy_loss
                      | -0.898
   explained variance
                     0.58
                      l 1e-06
   learning_rate
   loss
                      | 196
   n_updates
                      | 4720
   policy_gradient_loss | 0.000776
                      | 821
   value_loss
```

```
rollout/
                        2.61e+03
  ep len mean
  ep rew mean
                      | 1.68e+03
time/
  fps
                       | 121
                      | 474
  iterations
  time elapsed
                        1990
  total_timesteps
                      | 242688
                      | 0.0145381335
  approx_kl
  clip_fraction
                      0.0238
  clip_range
                      0.2
  entropy loss
                      | -0.901
  explained variance | 0.74
  learning rate
                      le-06
  loss
                      I 71.6
  n updates
                      4730
  policy_gradient_loss | -0.00581
  value loss | 163
rollout/
  ep len mean
                      | 2.59e+03
                      | 1.68e+03
  ep_rew_mean
time/
                      | 121
  fps
                      | 475
  iterations
  time_elapsed
                      | 1994
  total_timesteps
                      | 243200
train/
                      0.0069624404
  approx_kl
  clip_fraction
                      0.2
  clip_range
                      | -0.874
  entropy_loss
  explained variance | 0.711
                      l 1e-06
  learning_rate
  loss
                      | 338
  n_updates
                      | 4740
  policy_gradient_loss | -0.00493
  value_loss
                      | 559
rollout/
                      | 2.59e+03
  ep len mean
  ep rew mean
                      | 1.68e+03
time/
                      | 121
  fps
  iterations
  time_elapsed
                    | 1998
  total_timesteps
                      | 243712
train/
  approx kl
                      0.00017297524
  clip_fraction
  clip_range
                      0.2
  entropy_loss
                      | -0.866
  explained variance | 0.615
  learning_rate
                      | 1e-06
  loss
                      | 518
  n_updates
                      | 4750
  policy_gradient_loss | -0.00101
  value_loss
                      | 2.59e+03
  ep_len_mean
  ep_rew_mean
                      1.68e+03
time/
  fps
                      | 121
                      | 477
  iterations
  time elapsed
                        2002
                     244224
  total_timesteps
                      | 0.0030964797
  approx_kl
  clip fraction
  clip range
                      0.2
  entropy loss
                      | -0.9
  explained_variance
                      0.737
  learning_rate
                       1e-06
                      94.7
  n updates
                      | 4760
  policy_gradient_loss | -0.000848
  value loss
                      | 195
```

```
rollout/
                        2.58e+03
  ep len mean
   ep rew mean
                       | 1.68e+03
time/
                        121
  fps
                        478
   iterations
                      | 2006
   time elapsed
  total_timesteps
                      244736
train/
  approx kl
                      | 0.0071354173
   clip_fraction
  clip range
                      0.2
   entropy_loss
                        -0.888
   explained variance
                      0.921
                       l 1e-06
   learning_rate
                       | 93.7
                       | 4770
   n_updates
   policy_gradient_loss | -0.00257
   value_loss
                     | 170
rollout/
                        2.58e+03
   ep_len_mean
  ep_rew_mean
                      | 1.68e+03
time/
                      | 121
                      | 479
  iterations
  time elapsed
                      | 2011
                     | 245248
  total_timesteps
  approx kl
                      0.0007820149
   clip_fraction
                      0.2
   clip_range
   entropy loss
                      | -0.938
   explained_variance | 0.693
   learning_rate
                      | 1e-06
  loss
                       | 283
   n_updates
                       | 4780
   policy_gradient_loss | -0.000119
   value_loss
                      | 581
rollout/
   ep len mean
                      | 2.56e+03
  ep_rew_mean
                      | 1.68e+03
time/
  fps
                      121
                      | 480
  iterations
                     | 2015
   time_elapsed
   total_timesteps
                      | 245760
train/
                      | 0.013953129
  approx_kl
   clip fraction
                      0.00215
   clip_range
                      0.2
   entropy_loss
                      j -0.959
   explained_variance | 0.882
   learning_rate
                      | 1e-06
   loss
                       | 56.8
   n updates
                       | 4790
   policy_gradient_loss | -0.00545
   value loss
                       | 136
rollout/
                     | 2.56e+03
  ep_len_mean
                      | 1.68e+03
  ep_rew_mean
time/
                        121
  fps
   iterations
   time_elapsed
                        2019
   total_timesteps
                      | 246272
train/
```

0.0028845381

0.000781

0.2

| 0.771 | 1e-06

| 4800

| 430

policy_gradient_loss | -0.00435

approx kl

n_updates

value_loss

loss

clip_fraction
clip_range

entropy_loss
explained variance

learning_rate

rollout/ ep_len_mean | 2.54e+03 ep_rew_mean | 1.68e+03 time/ fps | 121 iterations | 482 time elapsed total_timesteps | 246784 train/ approx_kl | 0.0011297122 clip fraction clip_range
entropy_loss 0.2 -0.87 explained_variance | 0.795 l 1e-06 learning_rate | 195 loss n updates 4810 policy_gradient_loss | -0.000884 value_loss | 343 ep_len_mean ep_rew_mean | 2.54e+03 | 1.68e+03 time/ | 121 fps iterations | 2027 time_elapsed total timesteps | 247296 train/ 0.0006239391 approx_kl | 0 clip_fraction 0.2 clip range entropy_loss | -1.06 explained variance | 0.712 | 1e-06 learning_rate loss | 135 n_updates | 4820 policy_gradient_loss | -0.00127 value_loss | 652 | 2.54e+03 ep_len_mean ep_rew_mean | 1.68e+03 time/ | 121 fps iterations time_elapsed | 2032 | 247808 total_timesteps 0.0072669755 0.0133 0.2 approx kl clip_fraction clip range entropy_loss | -0.844 explained_variance | 0.924 learning_rate | 1e-06 | 48.3 loss | 4830 n_updates policy_gradient_loss | -0.00548 value loss | 126 rollout/ | 2.53e+03 ep_len_mean ep_rew_mean | 1.68e+03 time/ | 121 fps iterations | 485 time elapsed | 2036 | 248320 total_timesteps train/ approx kl 0.0031341831 clip fraction 0.00313 clip_range
entropy_loss 0.2 | -0.734 explained_variance | 0.883 learning_rate | 1e-06 | 68.3 n updates

policy_gradient_loss | -0.00121

value_loss	269
rollout/	I I
ep len mean	2.53e+03
ep_rew_mean	1.68e+03
time/	
fps iterations	121 486
time elapsed	400 2040
total timesteps	248832
train/	į į
approx_kl	0.0013294789
<pre> clip_fraction clip range</pre>	0.00703 0.2
entropy loss	-0.874
explained_variance	0.536
learning_rate	1e-06
loss	332
<pre> n_updates policy_gradient_loss</pre>	4850 -0.000268
value loss	731
rollout/	 2.52e+03
<pre> ep_len_mean ep rew mean</pre>	2.52e+03
time/	
fps	121
iterations	487
time_elapsed	2044
<pre> total_timesteps train/</pre>	249344
approx kl	0.0008606635
clip_fraction	0.00176
clip_range	0.2
<pre> entropy_loss explained variance</pre>	-0.798 0.915
learning rate	1e-06
loss	61.4
n_updates	4860
policy_gradient_loss	-0.00174
value_loss	210
rollout/	
ep_len_mean	2.52e+03
<pre> ep_rew_mean time/</pre>	1.68e+03
fps	121
iterations	488
time_elapsed	2049
<pre> total_timesteps train/</pre>	249856
approx_kl	I 0.0017542476
clip_fraction	0
clip_range	0.2
entropy_loss	-0.909
<pre> explained_variance learning_rate</pre>	0.828 1e-06
	102
· — ·	4870
policy_gradient_loss	
value_loss	268
rollout/	
ep_len_mean	2.52e+03
ep_rew_mean	1.68e+03
time/ fps	
iterations	489
time_elapsed	2054
total_timesteps	250368
train/ approx kl	 0.00954378
approx_kt clip_fraction	0.00954576
clip_range	0.2
entropy_loss	-0.954
• • •	0.759
<pre> learning_rate loss</pre>	1e-06 122
n updates	'
i upuaces	4880

```
policy_gradient_loss | -0.00391
   value_loss | 164
                     | 2.5e+03
   ep_len_mean
  ep_rew_mean
                    | 1.68e+03
time/
                      121
  fps
                     | 490
  iterations
                    2058
   time elapsed
                      | 250880
   total_timesteps
train/
                      0.00047709618
  approx_kl
   clip fraction
                     0.2
   clip range
  entropy_loss
                     | -0.955
   explained variance | 0.829
   learning_rate
                     le-06
                      | 103
   loss
   n updates
   policy_gradient_loss | 0.000696
   value_loss | 205
rollout/
  ep len mean
                     | 2.27e+03
  ep_rew_mean
                     | 1.7e+03
time/
  fps
                      | 121
                      | 491
   iterations
                    | 2062
| 251392
  time elapsed
   total timesteps
train/
                     | 0.0034900713
  approx kl
                    0.000195
   clip_fraction
   clip range
                    0.2
  entropy_loss | -0.957
explained_variance | 0.801
learning_rate
   learning_rate
                     | 1e-06
   loss
                      | 66.6
   n updates
                      | 4900
   policy gradient loss | -0.00262
   value_loss | 325
  ep_len_mean
                     | 2.27e+03
   ep_rew_mean
                    | 1.7e+03
time/
  fps
                      | 121
                     | 492
  iterations
   time_elapsed
                    | 2066
                     | 251904
  total_timesteps
train/
                     | 0.000775823
  approx kl
   clip_fraction
                    | 0.00156
                    | 0.2
   clip_range
   entropy_loss
                     | -0.889
   explained variance | 0.485
                    | 1e-06
   learning_rate
                      383
   loss
   n_updates
                      | 4910
   policy gradient loss | 0.000384
                      | 811
   value_loss
rollout/
                     | 2.27e+03
   ep_len_mean
   ep_rew_mean
                      | 1.7e+03
time/
                      | 121
```

| 493

| 2070

0.2

0.856

| 1e-06 | 40.1

| 252416

0.003913844

iterations time_elapsed

approx_kl
clip_fraction
clip_range

train/

loss

total_timesteps

entropy loss

explained_variance
learning_rate

n_updates policy_gradient_loss value_loss	4920 0.000616 136
rollout/	
ep_len_mean ep rew mean	1.7e+03
time/	
fps	121
iterations	494 2075
<pre>time_elapsed total timesteps</pre>	252928
train/	
approx_kl	0.0049029635
clip_fraction	0.00449 0.2
<pre> clip_range entropy_loss</pre>	-0.778
explained_variance	0.81
learning_rate	1e-06
loss n updates	47.5 4930
	-0.00216
value_loss	136
L rollou+/	
rollout/ ep_len_mean	
ep_rew_mean	1.71e+03
time/	į į
fps	121
<pre>iterations time_elapsed</pre>	495 2079
total timesteps	253440
train/	i i
approx_kl	0.0011982439
<pre> clip_fraction clip range</pre>	0.000781 0.2
entropy_loss	-0.973
explained_variance	0.671
learning_rate	1e-06
loss	201
<pre> n_updates policy_gradient_loss</pre>	4940 -0.000802
value_loss	545
rollout/	I I
ep_len_mean	2.13e+03
ep_rew_mean	1.71e+03
time/	
fps iterations	121 496
time elapsed	2083
total_timesteps	253952
train/	
<pre>approx_kl clip_fraction</pre>	0.00082871027 0.000195
clip_rraction	0.000133
entropy_loss	-0.892
explained_variance	0.838
<pre>learning_rate loss</pre>	1e-06
n updates	09.9 4950
	-0.00183
value_loss	280
rollout/	 I I
rollout/ ep_len_mean	
ep_len_mean ep_rew_mean	 1.97e+03 1.72e+03
ep_len_mean ep_rew_mean time/	1.72e+03
ep_len_mean ep_rew_mean	
ep_len_mean ep_rew_mean time/ fps	1.72e+03
<pre>ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps</pre>	1.72e+03
<pre>ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/</pre>	1.72e+03
<pre>ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx kl</pre>	1.72e+03
<pre>ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction</pre>	1.72e+03
<pre>ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx kl</pre>	1.72e+03
<pre>ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range</pre>	1.72e+03

loss n_updates policy_gradient_loss value_loss	107 4960 -0.00221 224
rollout/	
ep_len_mean	
ep rew mean	1.72e+03
time/	į į
fps	121
iterations	498
time_elapsed	2091 254976
<pre> total_timesteps train/</pre>	254970
approx kl	0.0012625739
clip_fraction	0
clip_range	0.2
entropy_loss	-1.01
explained_variance	0.729
learning_rate loss	1e-06 381
tuss n updates	301 4970
policy_gradient_loss	-0.000205
value loss	599
rollout/	1 200 1
ep_len_mean	1.89e+03 1.73e+03
ep_rew_mean time/	1.736+03
fps	121
iterations	499
time_elapsed	2096
total_timesteps	255488
train/	
approx_kl	0.0039401073
clip_fraction	0.00176 0.2
<pre> clip_range entropy_loss</pre>	-0.979
explained variance	0.497
learning rate	1e-06
loss	281
n_updates	4980
policy_gradient_loss	-0.00521
value_loss	754
rollout/	
ep_len_mean	1.73e+03
ep_rew_mean	1.74e+03
time/	
fps iterations	121 500
time elapsed	2100
total timesteps	256000
train/	i
approx_kl	0.0005440123
clip_fraction	0.00254
clip_range	0.2 -0.994
<pre> entropy_loss explained variance </pre>	-0.994 0.845
learning_rate	1e-06
loss	154
n_updates	4990
	-0.00232
value_loss	394
rollout/	
ep_len_mean	1.73e+03
ep_rew_mean	1.74e+03
time/	
fps	121
iterations	501
<pre> time_elapsed total timesteps</pre>	2104 256512
train/	
approx_kl	0.002903035
clip_fraction	0
clip_range	0.2
entropy_loss	-0.886
explained_variance	0.327

learning_rate	1e-06
loss	394
n_updates	5000
<pre>policy_gradient_loss</pre>	
value_loss	830
rollout/	
ep_len_mean	1.73e+03
ep_rew_mean	1.74e+03
time/	
fps	121
iterations	502
time_elapsed	2108
total_timesteps	257024
train/	
approx_kl	0.0009736577
clip_fraction	0 0.2
clip_range entropy loss	-0.952
_ `	0.899
	1e-06
loss	51
n updates	5010
policy_gradient_loss	
value_loss	143
77	
rollout/	1 720±03
'	1.73e+03
ep_rew_mean	1.74e+03
time/	
fps iterations	503
time elapsed	2112
total timesteps	257536
train/	237330
approx kl	0.006264209
clip_fraction	0.0135
	0.2
_	-0.925
_ `	0.877
learning rate	1e-06
loss	41.5
n_updates	5020
i policy_gradient_loss	-0.00285
value loss	156
rollout/	
'	1.51e+03
ep_rew_mean	1.76e+03
time/	
fps iterations	121
time elapsed	504 2117
time_etapsed total_timesteps	2117 258048
total_timesteps train/	430040
approx kl	
<u> </u>	0.0105
clip_rraction	0.0103
entropy loss	-0.95
_ '	0.689
learning rate	1e-06
	93.2
n updates	5030
policy_gradient_loss	
	263
rollout/	
ep_len_mean	1.51e+03
ep_rew_mean	1.76e+03
time/	
fps	121
	505
iterations	1 2121
time_elapsed	2121
<pre>time_elapsed total_timesteps</pre>	2121 258560
time_elapsed	258560
<pre>time_elapsed total_timesteps train/ approx_kl</pre>	258560
<pre>time_elapsed total_timesteps train/ approx_kl clip_fraction</pre>	258560
<pre>time_elapsed total_timesteps train/ approx_kl clip_fraction</pre>	258560

```
explained variance
                     | 0.7
                      | 1e-06
  learning_rate
                      171
  loss
                      | 5040
  n_updates
  policy_gradient_loss | -0.000888
  value loss
                        1.44e+03
  ep_len_mean
  ep_rew_mean
                      | 1.76e+03
time/
  fps
  iterations
                        506
  time elapsed
                      2125
                     259072
  total timesteps
                      | 0.014532967
  approx_kl
  clip fraction
                      0.0383
  clip_range
                      0.2
                      | -0.93
  entropy_loss
  explained_variance | 0.917
                      | 1e-06
  learning_rate
                      27.1
                      | 5050
  n updates
  policy_gradient_loss | -0.00613
  value loss | 63.5
rollout/
  ep len mean
                        1.35e+03
                      | 1.75e+03
  ep_rew_mean
                      | 121
  fps
                      | 507
  iterations
                      2129
  time_elapsed
  total_timesteps
                      | 259584
train/
  approx_kl
                      | 0.0006916551
  clip_fraction
                      | 0.000781
                      0.2
  clip_range
  entropy_loss
                      | -0.919
  explained variance | 0.578
                      l 1e-06
  learning_rate
                      | 211
                      | 5060
  n updates
  policy_gradient_loss | -0.000643
  value loss | 918
                      | 1.35e+03
  ep_len_mean
  ep_rew_mean
                      | 1.75e+03
time/
                      | 121
  fps
  iterations
                    | 2134
  time_elapsed
  total_timesteps
                      | 260096
train/
                      0.0019012161
  approx kl
  clip_fraction
                      | 0
  clip range
                      0.2
  entropy_loss
                      | -0.918
  explained variance | 0.369
  learning_rate
                      | 1e-06
  loss
                      | 5070
  n_updates
  policy_gradient_loss | -0.00222
  value_loss
                      | 1.17e+03
  ep len mean
                      1.76e+03
  ep rew mean
time/
  fps
                      | 509
  iterations
                      | 2139
  time elapsed
  total_timesteps
                      | 260608
                      | 0.00054898683
  approx_kl
  clip fraction
                      | 0
  clip_range
                      0.2
```

entropy_loss	-0.955
explained variance	0.697
• • • •	
learning_rate	1e-06
loss	62.8
n_updates	5080
<pre>policy_gradient_loss </pre>	0.00029
value loss	166
rollout/	1
ep_len_mean	1.17e+03
ep_rew_mean	1.76e+03
time/	
fps	121
literations	510
time elapsed	2143
total_timesteps	261120
	201120
train/	
approx_kl	0.0011362439
clip_fraction	0
clip_range	0.2
entropy_loss	-0.976
explained variance	0.387 i
learning rate	l 1e-06
loss	16-00 656
!	'
n_updates	5090
	-0.0019
value_loss	870
rollout/	
ep len mean	1.17e+03
ep rew mean	1.76e+03
· · · · · · · · · · · · · · · · · · ·	1.700.05
time/	
fps	121
iterations	511
time_elapsed	2147
total timesteps	261632
train/	i i
approx kl	0.0011253112
	0.0011233112
clip_fraction	
clip_range	0.2
entropy_loss	-1.01
<pre> explained_variance</pre>	0.784
learning_rate	1e-06
loss	63.9
n updates	5100
policy_gradient_loss	
	202
value_toss	202
1	
rollout/	
ep_len_mean	1.15e+03
ep_rew_mean	1.76e+03
time/	
fps	121
iterations	512
time_elapsed	2151
total timesteps	262144
	404177
train/	
approx_kl	0.0014861416
clip_fraction	0.00469
clip_range	0.2
entropy_loss	-1.02
explained variance	0.797
learning rate	l 1e-06
loss	16-00 75
•	5110
n_updates	!
1 , ,_3	-0.00108
value_loss	158
rollout/	
ep_len_mean	1.15e+03
ep rew mean	1.76e+03
time/	i i
fps	121
	'
iterations	513
time_elapsed	2155
total_timesteps	2155 262656
	262656
total_timesteps	
total_timesteps train/	262656

```
clip_range
                      0.2
   entropy_loss
                      | -1.03
   explained_variance | 0.684
                      | 1e-06
   learning_rate
                      | 222
   loss
                     | 5120
   n updates
   policy_gradient_loss | -0.00436
   value_loss | 657
rollout/
                      | 1.15e+03
   ep_len_mean
  ep_rew_mean
                      | 1.76e+03
time/
  fps
                      | 121
   iterations
                      | 514
   time elapsed
                     | 2160
  total timesteps
                    | 263168
train/
  approx_kl
                      0.0052444264
   clip_fraction
                     | 0.2
   clip_range
  entropy_loss | -0.933
explained_variance | 0.879
                     | 1e-06
   learning_rate
                     | 70.2
   n updates
   policy_gradient_loss | -0.00201
   value loss | 141
                      | 1.15e+03
   ep len mean
                     1.76e+03
  ep_rew_mean
time/
                      121
  fps
  iterations
                     | 515
                    | 2164
| 263680
  time_elapsed
  total_timesteps
train/
                      | 0.00049166905
  approx_kl
  clip_fraction
                     | 0.2
   clip_range
                      | -0.914
   entropy_loss
   explained_variance | 0.887
   learning_rate | 1e-06
                      | 95.1
   n updates
   policy_gradient_loss | -0.00197
   value_loss | 174
  ep_len_mean
                    | 1.14e+03
| 1.78e+03
  ep_rew_mean
                      | 121
  | 121
| 516
| 2168
| total_timesteps | 2645
| ann/
                      | 264192
train/
                      0.00046531553
  approx kl
   clip_fraction
   clip range
                      0.2
                     | -0.918
   entropy_loss
   explained_variance | 0.89
                      | 1e-06
   learning_rate
                      | 62.9
   loss
   n_updates
                      | 5150
   policy_gradient_loss | -0.00101
   value_loss
                      | 151
rollout/
                      | 1.14e+03
  ep len mean
                     1.78e+03
  ep_rew_mean
time/
                      | 121
  iterations
                      | 517
                      | 2172
   time elapsed
                      | 264704
  total_timesteps
train/
                      0.0013043905
  approx_kl
```

```
clip_fraction
                      | 0
                      0.2
   clip_range
                      -0.91
   entropy_loss
   explained_variance
                     | 0.549
   learning_rate
                      | 1e-06
                      | 159
                      | 5160
   n updates
   policy_gradient_loss | -0.00269
   value loss | 846
rollout/
  ep len mean
                        1.14e+03
                      | 1.78e+03
   ep_rew_mean
time/
                      i 121
  fps
  iterations
                     | 2176
   time elapsed
  total timesteps
                      265216
train/
  approx kl
                      0.00042287074
   clip_fraction
   clip_range
                      0.2
   entropy_loss
                      | -0.923
   explained variance | 0.882
                      | 1e-06
   learning_rate
                      | 64
                      | 5170
   n_updates
   policy_gradient_loss | 7.57e-05
   value_loss
              | 169
  ep_len_mean
                     | 1.1e+03
  ep_rew_mean
                      | 1.78e+03
time/
  fps
                      | 121
                      | 519
  iterations
   time_elapsed
                     | 2181
  total_timesteps
                      | 265728
                      | 0.003974015
  approx kl
   clip_fraction
                      0.00566
                      0.2
   clip range
   entropy loss
                      | -0.874
   explained variance | 0.809
   learning_rate
                      | 1e-06
   loss
                      72.7
   n_updates
                      | 5180
   policy_gradient_loss | -0.00238
   value_loss | 173
rollout/
                      | 1.1e+03
  ep_len_mean
  ep rew mean
                      | 1.78e+03
time/
  fps
                      | 121
   iterations
                      | 520
   time elapsed
                      | 2185
  {\tt total\_timesteps}
                      | 266240
train/
   approx_kl
                      0.0006349683
   clip fraction
   clip_range
                      0.2
                      -0.816
   entropy_loss
   explained_variance
                      | 0.591
   learning_rate
                      | 1e-06
   loss
                        458
   n updates
                        5190
   policy_gradient_loss | 0.00101
rollout/
  ep len mean
                      1.09e+03
                      1.77e+03
  ep_rew_mean
time/
                      | 121
  fps
   iterations
                      | 521
                      | 2189
   time_elapsed
   total_timesteps
                      | 266752
train/
```

```
approx_kl
                      0.0023542815
   clip_fraction
                      0.0041
  clip_range
entropy_loss
                     | 0.2
                      | -0.879
   explained variance | 0.763
   learning_rate
                     | 1e-06
   loss
                      | 120
              5200
   n updates
   policy_gradient_loss | -0.00299
   value_loss | 175
rollout/
                     | 1.08e+03
   ep_len_mean
                     1.76e+03
  ep rew mean
time/
                      | 121
                     | 522
  iterations
  time_elapsed
                    | 2194
  total_timesteps
                      | 267264
train/
                     0.00025424908
  approx_kl
   clip_fraction
                      0.2
  clip_range
entropy_loss
                     | -0.879
   explained_variance | 0.277
   learning_rate | 1e-06
                      | 291
   loss
   n_updates
                      | 5210
   policy_gradient_loss | -0.000843
rollout/
  ep len mean
                      | 1.08e+03
  ep_rew_mean
                      | 1.76e+03
time/
                      | 121
  fps
                    | 523
| 2198
| 267776
   iterations
  time_elapsed
  total_timesteps
train/
  approx_kl
                      0.0003033554
  clip_fraction
   clip_range
                     | 0.2
  entropy_loss | -0.886
explained_variance | 0.431
   learning_rate
                      l 1e-06
                      | 115
   n updates
                      | 5220
   policy_gradient_loss | -0.000223
   value_loss | 592
rollout/
  ep_len_mean
                     | 1.07e+03
                    i 1.76e+03
  ep_rew_mean
time/
  fps
                      | 121
                      | 524
  iterations
                  | 2202
| 268288
  time_elapsed
  total timesteps
train/
  approx kl
                      0.0012278347
   clip_fraction
                     | 0
                     0.2
   clip_range
   entropy_loss
                      | -0.944
   explained_variance | 0.776
   learning_rate
                      | 1e-06
   loss
                      | 115
                      | 5230
   n_updates
   policy_gradient_loss | -0.000327
              | 254
   value_loss
rollout/
                    | 1.07e+03
  ep_len_mean
  ep_rew_mean
time/
                      | 121
                      | 525
  iterations
   time elapsed
                      | 2206
   total_timesteps
                      | 268800
```

```
train/
                       0.0012573535
   approx_kl
   clip fraction
                       0.00156
                       0.2
   clip_range
                       1 -0.974
   entropy_loss
   explained_variance | 0.394
   learning_rate
                       | 1e-06
                       | 408
                       5240
   n updates
   policy_gradient_loss | 0.00192
   value_loss | 775
rollout/
                        1.08e+03
   ep len mean
                       | 1.76e+03
   ep rew mean
time/
                       | 121
  fps
   iterations
                       | 526
                       | 2210
   time_elapsed
   total_timesteps
                       | 269312
train/
                       | 0.0012971179
   approx kl
   clip_fraction
                       0.00547
   clip range
                       0.2
                       -0.907
   entropy_loss
   explained variance | 0.931
   learning_rate
                       | 1e-06
   loss
                       | 5250
   n_updates
   policy_gradient_loss | -0.00159
   value_loss
                       | 63.5
rollout/
                       | 1.08e+03
   ep_len_mean
   ep_rew_mean
                     | 1.76e+03
time/
  fps
                       | 121
   iterations
                       | 527
                     | 2215
   time_elapsed
   total_timesteps
                       | 269824
train/
  approx kl
                       0.002642356
   clip_fraction
   clip_range
                       0.2
   entropy_loss
                       | -0.969
   explained variance | 0.703
   learning_rate
                       | 1e-06
                        580
   loss
   n_updates
                       | 5260
   policy_gradient_loss | -0.0023
   value_loss
                      | 1.07e+03
   ep_len_mean
   ep_rew_mean
                       | 1.76e+03
time/
  fps
                       | 121
                       | 528
   iterations
                       | 2220
   time elapsed
   total timesteps
                       | 270336
train/
                       | 0.006718179
   approx_kl
                       0.00762
   clip_fraction
   clip_range
                       0.2
   entropy_loss
                       | -0.902
   explained_variance | 0.862
                       | 1e-06
   learning_rate
                       | 43.7
   loss
   n updates
                       | 5270
   policy_gradient_loss | -0.0041
   value loss
rollout/
   ep len mean
                       | 1.06e+03
   ep_rew_mean
                       | 1.76e+03
time/
                       | 121
   fps
   iterations
                       | 529
                       2224
   time_elapsed
```

```
{\tt total\_timesteps}
                      | 270848
train/
  approx kl
                      0.0071003577
   clip_fraction
                      | 0
                      0.2
   clip range
                      | -0.931
   entropy_loss
   explained variance | 0.599
                      | 1e-06
   learning_rate
                      | 111
   loss
                      | 5280
   n_updates
   policy_gradient_loss | -0.00481
   value_loss
              | 522
rollout/
  ep_len_mean
ep_rew_mean
                      | 1.06e+03
                     1.76e+03
time/
  fps
  iterations
                      | 530
                     | 2228
   time elapsed
  total_timesteps
                     | 271360
train/
                      | 0.0009658482
  approx_kl
   clip_fraction
                     0.000195
  clip_range
entropy_loss
                     | 0.2
                      | -1.08
   explained_variance | 0.92
   learning_rate
                      le-06
                      | 146
   loss
                      | 5290
   n_updates
   policy_gradient_loss | -0.000186
   value loss
rollout/
  ep len mean
                      | 1.06e+03
                      | 1.76e+03
  ep_rew_mean
time/
                      | 121
                     | 531
   iterations
  time_elapsed
                    | 2232
   total timesteps
                      | 271872
train/
                      0.0040350193
   approx kl
   clip fraction
                     0.00371
  clip_range
entropy_loss
                      0.2
                     -0.953
   explained_variance | 0.751
   learning_rate | 1e-06
   loss
                      | 55.3
                      | 5300
   n updates
   policy_gradient_loss | -0.00183
   value loss
                      | 145
rollout/
                    1.06e+03
   ep len mean
   ep_rew_mean
                      | 1.76e+03
time/
                      | 121
  fps
   iterations
                      532
                    | 2237
| 272384
   time_elapsed
  total timesteps
train/
                      | 0.01358966
  approx_kl
   clip_fraction
                      0.0385
   clip range
                      0.2
                     | -0.906
   entropy_loss
   explained_variance | 0.671
                      | 1e-06
   learning_rate
                      | 39.2
                      | 5310
   n_updates
   policy_gradient_loss | -0.00447
   value_loss
                      | 111
rollout/
  ep_len_mean
                      | 1.06e+03
  ep_rew_mean
                      | 1.76e+03
time/
                      | 121
  fps
  iterations
                      | 533
```

```
time elapsed
                      | 2241
  total_timesteps
                      1 272896
train/
                      0.00095293624
  approx kl
                      0.00156
  clip_fraction
  clip_range
                      0.2
                      i -0.977
  entropy_loss
  explained_variance | 0.577
  learning_rate
                      | 1e-06
  loss
                      | 465
                      | 5320
  n updates
  policy_gradient_loss | -0.00123
  value loss
rollout/
  ep len mean
                      1.76e+03
  ep rew mean
time/
                      | 121
  fps
  iterations
                      | 534
                    | 2245
  time_elapsed
  total_timesteps
                    | 273408
train/
  approx kl
                      0.0026422506
                     | 0.00176
  clip_fraction
  clip range
                     0.2
                      | -0.998
  entropy_loss
  explained variance | 0.868
                     | 1e-06
  learning_rate
                      | 46.9
  n_updates
                      | 5330
  policy gradient loss | 0.000445
  value_loss | 151
                    1.06e+03
1.76e+03
  ep_len_mean
  ep_rew_mean
time/
                      | 121
                    | 535
  iterations
                    | 2249
  time elapsed
  total_timesteps
                     273920
                      | 0.007660489
  approx kl
  clip_fraction
                     0.00664
  clip range
                     0.2
                     | -0.964
  entropy_loss
  explained_variance | 0.578
  learning_rate
                      | 1e-06
                      | 211
  loss
                      | 5340
  n updates
  policy_gradient_loss | -0.00586
  value_loss | 872
rollout/
                     | 1.06e+03
  ep_len_mean
  ep_rew_mean
                     | 1.76e+03
time/
                      121
  fps
                      | 536
  iterations
  time elapsed
  total timesteps
                    274432
train/
  approx_kl
                      | 0.0019971617
  clip_fraction
                      0.00156
  clip_range
                      0.2
                     | -0.978
  entropy_loss
  explained_variance | 0.714
  learning_rate
                      | 1e-06
  loss
                      | 63.8
  n updates
  policy gradient loss | 0.000514
  value loss
                      | 1.06e+03
  ep len mean
                      | 1.78e+03
  ep_rew_mean
time/
                      | 121
  fps
```

```
iterations
                       | 537
   time_elapsed
                       | 2258
   total timesteps
                       274944
train/
                       | 0.00077619834
   approx kl
   clip_fraction
                       | 0.00156
   clip_range
entropy_loss
                       0.2
                       | -1.05
   explained variance | 0.53
                       | 1e-06
   learning_rate
   loss
                       | 5360
   n_updates
   policy_gradient_loss | -0.000211
                       | 810
   value_loss
   ep_len_mean
ep_rew_mean
                       | 1.07e+03
                       1.78e+03
time/
                       | 121
   fps
   iterations
                       | 538
                      | 2262
   time elapsed
   total_timesteps
                       | 275456
                       | 0.0052635754
   approx_kl
   clip fraction
   clip_range
                       0.2
   entropy loss
                       -1.01
   explained_variance | 0.887
   learning_rate
                       | 1e-06
   1055
                       1 108
   n_updates
                       | 5370
   policy_gradient_loss | -0.00305
   value loss
                       | 202
rollout/
   ep_len_mean
                       | 1.07e+03
   ep_rew_mean
                       | 1.78e+03
time/
   fps
                       | 121
                       | 539
   iterations
                       | 2266
   time elapsed
   total timesteps
                       | 275968
train/
                       0.00041526638
   approx_kl
   clip fraction
   clip_range
                      0.2
                       | -1.11
   entropy_loss
   explained_variance | 0.933
   learning_rate
                       | 1e-06
   loss
                       | 41
                       5380
   n updates
   policy_gradient_loss | -0.00132
   value loss
rollout/
                       1.06e+03
   ep len mean
   ep_rew_mean
                       | 1.78e+03
time/
                       121
   fps
   iterations
                       540
   time elapsed
                     | 2270
   total_timesteps
                       | 276480
train/
   approx kl
                       0.0020858236
   clip_fraction
   clip range
                       0.2
   entropy_loss
                       | -0.983
   explained variance
                     | 0.611
                       | 1e-06
   learning_rate
                       | 5390
   n_updates
   policy_gradient_loss | -0.00203
   value loss
   ep_len_mean
                       | 1.06e+03
   ep_rew_mean
                       | 1.78e+03
time/
```

```
fps
                      | 121
                      | 541
   iterations
   time_elapsed
                      2274
   total_timesteps
                      | 276992
train/
   approx_kl
                      | 0.0027392749
   clip fraction
                     0.0109
   clip_range
                      0.2
   entropy_loss
                      -1.06
   explained_variance | 0.519
   learning_rate
                    | 1e-06
                      | 148
   loss
                      | 5400
   n updates
   policy_gradient_loss | -0.00294
   value loss
                      | 710
rollout/
  ep len mean
                       1.06e+03
                      | 1.78e+03
   ep_rew_mean
time/
  fps
                      | 121
   iterations
                      | 542
   time_elapsed
                     | 2279
                    277504
  total_timesteps
train/
                     0.0036254025
  approx kl
   clip_fraction
   clip range
                     0.2
                      | -1.1
   entropy_loss
   explained variance | 0.866
   learning_rate
                      le-06
                      | 69
   n updates
                      5410
   policy gradient loss | -0.00256
                      | 163
   value_loss
rollout/
                      | 1.06e+03
  ep_len_mean
  ep_rew_mean
                     | 1.78e+03
time/
                      | 121
  iterations
                      | 543
                    | 2283
  time_elapsed
  total_timesteps
                    278016
train/
                      0.007260882
  approx kl
   clip_fraction
                     | 0.000781
   clip_range
                     0.2
                      | -1.02
   entropy_loss
   explained_variance | 0.797
   learning_rate
                      | 1e-06
                      79.3
   loss
                      | 5420
   n updates
   policy_gradient_loss | -0.00201
   value_loss | 242
rollout/
                     | 1.06e+03
   ep_len_mean
  ep rew mean
                     | 1.78e+03
time/
                      121
                     | 544
   iterations
                    | 2287
   time elapsed
   total_timesteps
                      | 278528
train/
                      | 0.0007139504
  approx_kl
   clip_fraction
                      0.2
   clip_range
   entropy_loss
                      | -1.02
   explained_variance | 0.772
   learning rate
                      l 1e-06
   loss
                      80.9
   n_updates
                      5430
   policy_gradient_loss | -0.00065
rollout/
  ep len mean
                     | 1.06e+03
                      | 1.78e+03
   ep_rew_mean
```

```
time/
                         121
   fps
   iterations
                         545
                        2291
   time_elapsed
                       1 279040
   total_timesteps
                        0.005025181
   approx kl
                       | 0.00117
   clip_fraction
   clip_range
                       0.2
   entropy_loss
                       | -1.03
   explained_variance | 0.578
   learning_rate
                       | 1e-06
                       | 88.7
   loss
                       | 5440
   n_updates
   policy_gradient_loss | -0.00387
                       | 249
   value loss
rollout/
   ep_len_mean
                        1.05e+03
   ep_rew_mean
                      | 1.77e+03
time/
                        121
   fps
                       | 546
   iterations
                      | 2295
   time elapsed
   total_timesteps
                       i 279552
train/
                       | 0.0015031572
  approx_kl
   clip fraction
                       0.2
   clip_range
   entropy_loss
                       | -1.04
   explained variance | 0.82
   learning_rate
                       | 1e-06
   loss
                       i 117
   n updates
                       | 5450
   policy_gradient_loss | -0.000217
   value loss
   ep_len_mean
                       | 1.05e+03
  ep_rew_mean
                      | 1.77e+03
time/
  fps
                       i 121
   iterations
                       | 547
                       | 2301
   time elapsed
   total_timesteps
                       | 280064
train/
                       0.0031427275
   approx_kl
   clip_fraction
                      | 0
                      0.2
   clip_range
                       | -1.03
   entropy_loss
   explained_variance | 0.549
                       l 1e-06
   learning_rate
                       | 240
   loss
                       5460
   n updates
   policy_gradient_loss | -0.00324
   value loss
                       | 822
rollout/
                      1.05e+03
   ep len mean
                       | 1.77e+03
   ep rew mean
time/
                       | 121
   fps
   iterations
                      | 548
                       | 2305
   time_elapsed
   {\tt total\_timesteps}
                       | 280576
train/
   approx kl
                       | 0.009423391
   clip_fraction
                       0.2
   clip range
                       | -1.07
   entropy_loss
   explained variance
                      0.854
                       l 1e-06
   learning_rate
   loss
                       | 108
                       | 5470
   n updates
   policy gradient loss | -0.00366
   value_loss
rollout/
                       | 1.06e+03
  ep_len_mean
```

```
ep rew mean
                        | 1.78e+03
 time/
                         121
    fps
                        | 549
    iterations
                       | 2309
    time elapsed
    total_timesteps
                       281088
 train/
                       0.0024813332
    approx_kl
    clip fraction
                      0.00547
    clip_range
entropy_loss
                      | 0.2
                       | -1.01
    explained_variance | 0.865
    learning_rate
                       | 1e-06
                        | 101
    loss
                       5480
    n updates
    policy gradient loss | -0.00274
    value loss
 rollout/
    ep len mean
                        | 1.06e+03
                       | 1.78e+03
    ep_rew_mean
 time/
                       | 121
    fps
                      | 550
    iterations
                     2313
    time_elapsed
    total timesteps
                       | 281600
 train/
    approx kl
                       | 0.001737011
                      | 0.0125
    clip_fraction
    clip_range
entropy_loss
                      | 0.2
| -1.08
    explained variance | 0.805
    learning_rate | 1e-06
    loss
                       | 82.6
                       5490
    n_updates
    policy_gradient_loss | -0.0015
               | 505
    value_loss
 rollout/
                     | 1.06e+03
    ep len mean
    ep rew mean
                       | 1.78e+03
 time/
                       | 121
    fps
                     | 551
| 2318
| 282112
    iterations
    time_elapsed
    total_timesteps
 train/
                       | 0.0016698259
    approx_kl
    clip_fraction
                       0.2
    clip range
    entropy_loss
                       | -1.12
    explained variance | 0.871
                       l 1e-06
    learning_rate
                       | 78.5
                       | 5500
    n_updates
    policy_gradient_loss | 7.82e-05
    value_loss | 172
 rollout/
                     1.07e+03
1.78e+03
    ep len mean
    ep rew mean
 time/
   fps
                       | 121
    iterations
                       | 552
                      | 2322
| 282624
    time elapsed
    total_timesteps
 train/
                       0.015550625
    approx_kl
                      0.112
    clip fraction
    clip range
                      | 0.2
    entropy loss
                       -1.07
    explained_variance | 0.737
    learning_rate
                       le-06
                       | 77.3
    loss
                       | 5510
    n_updates
    policy_gradient_loss | -0.00571
    value loss | 152
| rollout/
```

```
ep len mean
                       | 1.07e+03
   ep_rew_mean
                       | 1.78e+03
time/
                       121
  fps
                      553
   iterations
   time_elapsed
                      | 2326
  total timesteps
                      i 283136
train/
  approx kl
                      0.0012903896
   clip_fraction
   clip_range
                      0.2
                      | -1.1
   entropy_loss
   explained variance | 0.632
   learning_rate
                      | 1e-06
                       340
   loss
                       I 5520
   n_updates
   policy gradient loss | -0.00193
   value_loss | 780
rollout/
                      | 1.07e+03
   ep_len_mean
  ep_rew_mean
                    | 1.79e+03
time/
                      | 121
                     | 554
  iterations
  time_elapsed | 2330
total_timesteps | 283648
train/
                      0.0057207984
  approx_kl
                     0.0082
   clip fraction
   clip_range
                      0.2
  entropy_loss
                     | -1.04
   explained_variance | 0.911
   learning_rate | 1e-06
                      | 39.2
   loss
   n updates
                      | 5530
   policy_gradient_loss | -0.000613
   value_loss | 117
rollout/
                    | 1.07e+03
| 1.79e+03
   ep len mean
  ep_rew_mean
time/
  fps
                       121
                      | 555
  iterations
   time elapsed
                     | 2334
  total_timesteps
                     | 284160
train/
                      | 0.00025577843
  approx_kl
   clip_fraction
                      | 0
   clip_range
                      | 0.2
  entropy_loss | -1.1
explained_variance | 0.637
                      l 1e-06
   learning_rate
                      | 542
  loss
   n updates
                      | 5540
   policy_gradient_loss | -0.000403
   value loss
rollout/
  ep_len_mean
                      1.07e+03
                     | 1.79e+03
  ep_rew_mean
time/
                       | 121
  fps
  iterations
                      | 556
                     | 2339
   time_elapsed
   total_timesteps
                      | 284672
train/
   approx kl
                      0.0029033772
                     | 0.00859
   clip_fraction
   clip range
                      0.2
   entropy_loss
                      | -1.01
   explained variance | 0.892
                      | 1e-06
   learning_rate
   loss
                       | 78.2
   n updates
                      | 5550
   policy_gradient_loss | -0.00505
                      | 180
   value_loss
```

```
rollout/
                        1.07e+03
  ep len mean
  ep rew mean
                      1.8e+03
time/
  fps
                      | 121
                       557
  iterations
  time elapsed
                        2343
  total_timesteps
                      | 285184
                      | 0.004740035
  approx_kl
  clip_fraction
                      0.00469
  clip_range
                      0.2
  entropy loss
                      | -0.997
  explained variance | 0.862
  learning rate
                      l 1e-06
  loss
                      i 78
  n updates
                      5560
  policy_gradient_loss | -0.00446
  value loss
                      | 170
rollout/
  ep len mean
                      | 1.07e+03
                      | 1.79e+03
  ep_rew_mean
time/
                      | 121
  fps
                      | 558
  iterations
                      | 2347
  time_elapsed
  total_timesteps
                      | 285696
train/
                      0 00043314858
  approx_kl
  clip_fraction
                      0.2
  clip_range
                      | -1.17
  entropy_loss
  explained variance | 0.673
                      i 1e-06
  learning_rate
  loss
                      | 251
  n_updates
                      | 5570
  policy_gradient_loss | -0.00131
  value loss
rollout/
                      | 1.07e+03
  ep len mean
  ep rew mean
                      | 1.79e+03
time/
                      121
  fps
  iterations
                      559
                     | 2351
  time elapsed
  total_timesteps
                      | 286208
train/
                      0.0015981641
  approx kl
                      | 0.00176
  clip_fraction
  clip_range
                      0.2
  entropy_loss
                      | -1.07
  explained variance | 0.251
  learning_rate
                      | 1e-06
  loss
                      | 439
  n_updates
                      | 5580
  policy_gradient_loss | 0.000338
  value_loss
                      | 1.07e+03
  ep_len_mean
  ep_rew_mean
                      1.79e+03
```

time/ fps iterations 560 time elapsed 2356 total_timesteps | 286720 0.0032672957 approx_kl clip fraction 0.00371 clip range 0.2 entropy loss -1.06 explained_variance 0.913 learning_rate 1e-06 1 46.4 n updates | 5590 policy_gradient_loss | -0.00176 value loss | 120

```
rollout/
                        1.08e+03
  ep len mean
   ep rew mean
                      | 1.8e+03
time/
                        121
  fps
   iterations
                        561
   time elapsed
                      | 2360
  total_timesteps
                      | 287232
train/
  approx kl
                      0.0024467949
   clip_fraction
                      0.00195
  clip range
                      0.2
   entropy_loss
                      | -1.01
   explained variance | 0.84
                      | 1e-06
  learning_rate
                      | 45.1
                      | 5600
   n_updates
   policy_gradient_loss | 0.00156
   value_loss | 156
rollout/
                        1.08e+03
   ep_len_mean
  ep_rew_mean
                      | 1.8e+03
time/
                      | 121
                      | 562
  iterations
  time elapsed
                     | 2364
                     | 287744
  total_timesteps
                      0.0037598321
  approx kl
   clip_fraction
                      0.2
   clip_range
   entropy loss
                      | -1.05
   explained_variance | 0.68
   learning_rate
                      | 1e-06
  loss
                      | 162
   n_updates
                      | 5610
   policy_gradient_loss | 0.000339
   value_loss | 384
rollout/
                      | 1.08e+03
  ep len mean
  ep_rew_mean
                      1.8e+03
time/
  fps
                      121
                      | 563
  iterations
                     | 2368
   time_elapsed
   total_timesteps
                      | 288256
train/
                      | 0.0054299375
  approx_kl
                      0.00859
   clip fraction
   clip_range
                      0.2
  entropy_loss
                      | -0.979
   explained_variance | 0.744
   learning_rate
                      | 1e-06
   loss
                      1 62.3
   n updates
                      | 5620
   policy_gradient_loss | 0.000751
   value loss
                      | 187
rollout/
                     | 1.08e+03
  ep_len_mean
                      | 1.8e+03
  ep_rew_mean
time/
  fps
                        121
   iterations
   time_elapsed
                        2372
   total_timesteps
                      | 288768
train/
  approx kl
                      0.0052834274
   clip fraction
                      0.0277
   clip range
                      0.2
                      | -1.03
   entropy_loss
   explained variance
                      0.768
   learning_rate
                      | 1e-06
   loss
                       | 232
   n_updates
                        5630
   policy_gradient_loss | 0.000942
   value_loss
                      | 372
```

rollout/ ep_len_mean 1.08e+03 ep_rew_mean | 1.8e+03 time/ fps 121 iterations | 565 time elapsed 2377 total_timesteps | 289280 train/ 0.009293288 approx_kl clip_fraction 0.2 clip_range entropy loss -0.961 explained_variance | 0.66 l 1e-06 learning rate | 368 loss n updates 5640 policy_gradient_loss | -0.00607 value_loss | 564 ep_len_mean ep_rew_mean | 1.08e+03 | 1.81e+03 time/ | 121 fps iterations | 2381 time_elapsed total timesteps | 289792 train/ approx_kl 0.0022447952 | 0.000781 clip_fraction clip_range entropy_loss | 0.2 | -0.888 explained variance | 0.739 | 1e-06 learning_rate loss | 125 n_updates | 5650 policy_gradient_loss | -0.000827 value_loss | 287 | 1.08e+03 ep len mean ep_rew_mean | 1.81e+03 time/ | 121 fps | 567 iterations time_elapsed | 2386 | 290304 total_timesteps 0.000626329 approx kl 0.00117 clip_fraction clip range | -0.917 entropy_loss explained_variance | 0.348 learning_rate | 1e-06 loss | 560 | 5660 n_updates policy gradient loss | -0.00253 value loss | 1.23e+03 rollout/ | 1.08e+03 ep_len_mean

ep_rew_mean | 1.81e+03 time/ fps | 121 iterations | 568 time elapsed | 2390 | 290816 total_timesteps train/ 0.012628575 approx kl clip fraction 0.048 clip_range
entropy_loss 0.2 | -0.9 0.869 explained_variance learning_rate | 1e-06 | 39.7 | 5670 n updates policy_gradient_loss | -0.00429

value_loss	102
rollout/	
<pre> ep_len_mean ep rew mean</pre>	1.08e+03 1.82e+03
time/	1.026+05
fps	121
iterations	569
<pre> time_elapsed total_timesteps</pre>	2395 291328
train/	
approx_kl	0.0017553474
clip_fraction	0.000391 0.2
<pre> clip_range entropy_loss</pre>	0.2
explained_variance	0.7
learning_rate	1e-06
loss n updates	154 5680
. – .	-0.000615
value_loss	282
rollout/	I I
ep_len_mean	1.06e+03
ep_rew_mean	1.81e+03
time/ fps	
iterations	570
time_elapsed	2399
total_timesteps	291840
train/ approx kl	
clip_fraction	0.0000002237
clip_range	0.2
entropy_loss	-0.914
<pre> explained_variance learning rate</pre>	0.564 1e-06
loss	136
n_updates	5690
<pre>policy_gradient_loss</pre>	-0.000592
l value locc	I 016 I
value_loss	916
value_loss	916
rollout/	
rollout/ ep_len_mean	
rollout/	
rollout/ ep_len_mean ep_rew_mean time/ fps	1.06e+03
rollout/ ep_len_mean ep_rew_mean time/ fps iterations	1.06e+03
rollout/ ep_len_mean ep_rew_mean time/ fps	1.06e+03
rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps	1.06e+03
rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl	1.06e+03
rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction	1.06e+03
rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss	1.06e+03
rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance	1.06e+03
rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate	1.06e+03
rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance	1.06e+03
rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss	1.06e+03 1.81e+03
rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates	1.06e+03
rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss	1.06e+03 1.81e+03
rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss	1.06e+03
rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean	1.06e+03
rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss	1.06e+03
rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean	1.06e+03
rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations	1.06e+03
rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed	1.06e+03
rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations	1.06e+03
rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl	1.06e+03
rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction	1.06e+03
rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range	1.06e+03
rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance	1.06e+03
rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate	1.06e+03
rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance	1.06e+03

```
policy_gradient_loss | -5.46e-05
   value_loss | 105
                      | 1.06e+03
   ep_len_mean
  ep_rew_mean
                    | 1.8e+03
time/
                      | 121
  fps
                     | 573
  iterations
  time_elapsed | 2411
total_timesteps | 293376
train/
                      | 0.00028991594
  approx_kl
   clip fraction
  clip_range
entropy_loss
                      0.2
                     | -0.902
   explained variance | 0.636
   learning_rate | 1e-06
                      | 479
   loss
                      | 5720
  n updates
   policy_gradient_loss | -0.000727
   value_loss | 633
rollout/
                    | 1.06e+03
| 1.81e+03
  ep len mean
  ep_rew_mean
time/
  fps
                       | 121
                      | 574
  iterations
                    | 2416
| 293888
  time elapsed
  total_timesteps
train/
                     0.00085691107
0
  approx kl
   clip_fraction
   clip range
                     0.2
  entropy_loss | -1.07
explained_variance | 0.629
                      | 1e-06
   learning_rate
                     238
   loss
   n updates
                      | 5730
   policy gradient loss | -0.000372
   value_loss | 555
  ep_len_mean
ep_rew_mean
                      | 1.05e+03
                     | 1.8e+03
time/
  fps
                      | 121
                      | 575
  iterations
                     2420
   time_elapsed
                     | 294400
  total_timesteps
train/
                      | 0.004430171
  approx kl
   clip_fraction
                     | 0
                     | 0.2
   clip_range
   entropy_loss
                      | -0.891
   explained variance | 0.146
                     | 1e-06
   learning_rate
                      547
   loss
                      5740
   n_updates
   policy gradient loss | -0.00266
                       | 912
   value loss
rollout/
                     | 1.05e+03
   ep_len_mean
   ep_rew_mean
                      | 1.8e+03
time/
                      | 121
```

| 576

| 2424

| 294912

0.00664

| -0.871

| 1e-06 | 421

0.2

0.002970966

iterations
time_elapsed

approx_kl

train/

loss

total_timesteps

clip_fraction
clip_range

entropy_loss

learning_rate

explained_variance | 0.345

n_updates	5750
policy_gradient_loss	
value_loss	904
rollout/	ļ
ep_len_mean	1.05e+03
ep_rew_mean time/	1.8e+03
fps	121
iterations	577
<pre> time_elapsed total timesteps</pre>	2428 295424
totat_timesteps train/	295424
approx_kl	0.002817844
clip_fraction	0.00957
clip_range entropy_loss	0.2 -0.881
entropy_toss explained variance	0.859
· · · · · · · · · · · · · · · · · · ·	1e-06
•	57.5
n_updates	5760
	-0.00244 139
rollout/ ep len mean	 1.06e+03
ep_ten_mean	1.81e+03
time/	
fps	121
iterations	578
<pre>time_elapsed total timesteps</pre>	2432 295936
train/	
approx_kl	0.0010640908
clip_fraction	0
clip_range entropy_loss	0.2 -0.937
	0.82
learning_rate	le-06
loss	124
<pre> n_updates policy_gradient_loss </pre>	5770
value_loss	0.000443 248
111+ /	
rollout/ ep len mean	
ep_rew_mean	1.81e+03
time/	ĺ
fps	121
<pre> iterations time elapsed</pre>	579 2437
total timesteps	296448
train/	i i
approx_kl	0.00029443507
<pre> clip_fraction clip range</pre>	0.000391 0.2
entropy_loss	-0.861
<pre> explained_variance </pre>	0.569
learning_rate	1e-06
loss n updates	373 5780
::::	0.000833
	636
rollout/	
ep_len_mean	1.07e+03
ep_rew_mean	1.82e+03
time/	
fps iterations	580
time_elapsed	2441
total_timesteps	296960
train/	 0.0039721075
approx_kl clip_fraction	0.0039/210/5 0
clip_range	0.2
entropy_loss	-0.827
explained_variance	0.793
learning_rate	1e-06

l loss	159 5790
<pre> n_updates policy_gradient_loss </pre>	
value_loss	220
rollout/	
ep_len_mean	
ep_rew_mean	1.82e+03
time/	<u> </u>
fps	121
<pre> iterations time_elapsed</pre>	581 2445
total_timesteps	297472
train/	į
approx_kl	0.002330237
<pre> clip_fraction clip range</pre>	0 0.2
entropy_loss	-0.944
<pre> explained_variance </pre>	0.693
learning_rate	1e-06
loss n updates	138 5800
policy_gradient_loss	
value_loss	545
rollout/	I
ep_len_mean	1.07e+03
ep_rew_mean	1.82e+03
time/	121
fps iterations	121 582
time elapsed	2449
total_timesteps	297984
train/	
approx_kl clip_fraction	0.002719542 0
clip_range	0.2
entropy_loss	-0.879
	0.85
<pre> learning_rate loss</pre>	1e-06 80.5
n_updates	5810
<pre>policy_gradient_loss </pre>	-0.00098
value_loss	144
rollout/	l I
ep_len_mean	1.07e+03
ep_rew_mean time/	1.82e+03
fps	121
iterations	583
time_elapsed	2454
<pre> total_timesteps train/</pre>	298496
approx_kl	0.0011665745
clip_fraction	0.00371
<pre> clip_range entropy loss</pre>	0.2 -0.784
entropy_toss explained variance	0.551
learning_rate	1e-06
loss	134
n_updates	5820
<pre>policy_gradient_loss value_loss</pre>	-0.000481 902
rollout/	
ep_len_mean	
ep_rew_mean	1.82e+03
time/	
fps iterations	121 584
time_elapsed	2458
total_timesteps	299008
train/	0.004330036
approx_kl clip fraction	0.004328026 0.00254
clip_fraction	0.2
entropy_loss	-0.827
<pre> explained_variance</pre>	0.657

learning_rate loss n_updates policy_gradient_loss value_loss	1e-06
rollout/	
ep_len_mean	1.08e+03 1.83e+03
ep_rew_mean time/	1.056+05
fps	
iterations	585
time elapsed	2462
total_timesteps	299520
train/	
approx_kl	0.0022275643
<pre> clip_fraction clip_range</pre>	0.00137 0.2
entropy_loss	-0.88
	0.738
• • •	le-06
loss	44.5
n_updates	5840
policy_gradient_loss	
value_loss	145
rollout/	
ep_len_mean	1.08e+03
ep_rew_mean	1.83e+03
time/	
fps	121
iterations	586 2467
time_elapsed total timesteps	300032
train/	
approx_kl	0.00429423
clip_fraction	0.00586
clip_range	0.2
entropy_loss	-0.887
explained_variance	0.409
learning_rate loss	1e-06 257
n updates	5850
policy_gradient_loss	
value_loss	507
mallau+/	
rollout/ ep len mean	
ep rew mean	1.83e+03
time/	
fps	121
iterations	587
time_elapsed	2471
<pre> total_timesteps train/</pre>	300544
approx kl	
clip_fraction	0
clip_range	0.2
entropy_loss	-0.959
explained_variance	0.631
<pre> learning_rate loss</pre>	1e-06 297
n updates	5860
policy_gradient_loss	
value_loss	510
rollout/ ep len mean	
ep_rew_mean	1.83e+03
time/	
fps	121
iterations	588
time_elapsed	2476
total_timesteps	301056
train/ approx kl	
approx_kt clip_fraction	0.0029773293
clip_range	0.2
entropy_loss	-0.885

```
explained variance
                     0.789
  learning_rate
                      | 1e-06
                      54.7
  loss
                      | 5870
  n_updates
  policy_gradient_loss | -0.00364
   value loss
                      | 175
                        1.08e+03
  ep_len_mean
                      | 1.84e+03
  ep_rew_mean
time/
  fps
                      | 121
  iterations
                        589
  time elapsed
                        2480
  total timesteps
                      | 301568
                      | 0.001688133
  approx_kl
  clip fraction
                      0.000977
  clip_range
                      0.2
                      | -0.906
  entropy_loss
  explained_variance | 0.779
                      | 1e-06
  learning_rate
                      | 42.9
  n updates
                      | 5880
  policy_gradient_loss | -0.00441
  value loss | 146
rollout/
  ep len mean
                        1.08e+03
                      | 1.84e+03
  ep_rew_mean
                      | 121
  fps
  iterations
                        590
                      2484
  time_elapsed
  total_timesteps
                      302080
train/
  approx_kl
                      | 0.00070002896
  clip_fraction
                      0.2
  clip_range
                      | -0.936
  entropy_loss
  explained_variance | 0.846
                      l 1e-06
  learning_rate
                      | 164
                      | 5890
  n updates
  policy_gradient_loss | -0.00206
  value loss
                      | 342
                      | 1.08e+03
  ep_len_mean
  ep_rew_mean
                      | 1.84e+03
time/
                      | 121
  fps
  iterations
                     | 2488
  time_elapsed
  total_timesteps
                      | 302592
train/
                      0.0031800321
  approx kl
  clip_fraction
                      0.000977
  clip range
                      0.2
  entropy_loss
                      | -0.924
  explained variance | 0.838
  learning_rate
                      | 1e-06
                      244
  loss
                      | 5900
  n_updates
  policy_gradient_loss | -0.0031
                        364
  value_loss
                      | 1.08e+03
  ep len mean
                      1.84e+03
  ep rew mean
time/
  fps
                      | 592
  iterations
  time elapsed
                        2493
  total_timesteps
                      | 303104
train/
                      | 0.0015719103
  approx_kl
  clip fraction
                      0.00586
  clip_range
                      0.2
```

entropy_loss	-0.799
explained_variance	0.834
learning_rate	1e-06
loss	31.8
n_updates	5910
<pre>policy_gradient_loss</pre>	-0.000986
value_loss	82.7
rollout/	
ep_len_mean	1.08e+03
ep_rew_mean	1.84e+03
time/	
fps	121
iterations	593
time_elapsed	2497
total_timesteps	303616
train/	
approx_kl	0.004037882
clip_fraction	0.0209
clip_range	0.2
1	-0.853
explained_variance	0.433
learning_rate	1e-06
loss	588
n_updates	5920
	0.000494
value_loss	811
rollout/	
ep_len_mean	
	1.85e+03
ep_rew_mean time/	1.056+05
fps	
iterations	121
time_elapsed	2501
total timesteps	304128
train/	304120
approx kl	
clip_fraction	0.0164
clip_range	0.2
entropy_loss	-0.865
explained variance	0.84
learning rate	l 1e-06
loss	66
n updates	5930
	1 -0.000940 1
policy_gradient_loss	
policy_gradient_loss	133
policy_gradient_loss	
policy_gradient_loss	
policy_gradient_loss value_loss rollout/	
policy_gradient_loss value_loss	133
policy_gradient_loss value_loss rollout/ ep_len_mean	133
policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean	133
policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/	133
policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed	133
policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations	133
policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed	133
policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl	133
policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction	133
policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range	133
policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss	133
policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance	133
policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate	133
policy_gradient_loss value_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss	133
policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates	133
policy_gradient_loss value_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss	133
policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss	133
policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss	133
policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss	133
policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss	133
policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean	133
policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean	133
policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/	133
policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps	133
policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations	133
policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed	133
policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps	133
policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/	133
policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps	133

```
clip_range
                      0.2
                     | -0.909
  entropy_loss
  explained_variance | 0.71
  learning_rate
                      | 1e-06
                      | 84.8
  loss
                     | 5950
  n updates
  policy_gradient_loss | -0.00159
  value loss | 207
rollout/
  ep_len_mean
                       1.08e+03
  ep rew mean
                      | 1.84e+03
time/
                      121
  fps
                      | 597
  iterations
  time elapsed
                     2514
  total timesteps
                    305664
train/
  approx_kl
                      0.0044884793
  clip_fraction
                      0.2
  clip_range
  entropy_loss
                     | -0.963
  explained_variance | 0.861
  learning_rate
                     | 1e-06
                     | 120
  loss
                      | 5960
  n updates
  policy_gradient_loss | -0.00316
  value loss
rollout/
                      | 1.08e+03
  ep len mean
                     1.84e+03
  ep_rew_mean
time/
                      | 121
 fps
  iterations
                     | 598
                    | 2518
  time_elapsed
  total_timesteps
                    | 306176
                      | 0.00085400825
  approx_kl
  clip_fraction
                     0.2
  clip_range
  entropy_loss
                      | -0.832
  explained_variance | 0.366
                      | 1e-06
  learning_rate
                      | 105
  n_updates
  policy_gradient_loss | 0.000116
  value_loss | 290
                    | 1.08e+03
  ep len mean
  ep_rew_mean
                     | 1.84e+03
time/
                      | 121
  iterations
                     | 2522
  time_elapsed
  total_timesteps
                      306688
train/
                      0.0033975393
  approx kl
  clip fraction
  clip range
                      0.2
                      | -0.891
  entropy_loss
  explained_variance | 0.759
                      | 1e-06
  learning_rate
  loss
                      | 5980
  n_updates
  policy_gradient_loss | -0.00338
  value_loss
rollout/
                      | 1.08e+03
  ep len mean
  ep_rew_mean
                     1.84e+03
time/
                      | 600
  iterations
                      | 2526
  time elapsed
  total_timesteps
                      307200
train/
                      0.00074625865
  approx_kl
```

```
clip_fraction
                      | 0
                      0.2
   clip_range
                      -0.87
   entropy_loss
   explained_variance
                     0.648
   learning_rate
                      | 1e-06
                      | 338
   n updates
                      | 5990
   policy_gradient_loss | 2.59e-05
   value loss | 648
rollout/
  ep len mean
                        1.09e+03
                      | 1.86e+03
   ep_rew_mean
time/
                      i 121
  fps
  iterations
                     | 2531
   time elapsed
   total timesteps
                      307712
train/
  approx kl
                      0.00038446928
   clip_fraction
   clip_range
                      0.2
   entropy_loss
                      | -0.786
   explained variance | 0.48
                      | 1e-06
   learning_rate
                      | 51.7
                      | 6000
   n_updates
   policy_gradient_loss | -6.11e-05
   value_loss
              | 185
  ep_len_mean
                      | 1.08e+03
  ep_rew_mean
                      | 1.85e+03
time/
  fps
                      | 121
                      602
  iterations
   time_elapsed
                      | 2535
  total_timesteps
                      308224
                      | 0.000675026
  approx kl
   clip_fraction
                      0.2
   clip range
   entropy_loss
                      | -0.762
                     0.459
   explained variance
   learning_rate
                      | 1e-06
   loss
                      175
   n_updates
                      | 6010
   policy_gradient_loss | -0.0012
   value_loss
                      | 751
rollout/
                      | 1.08e+03
   ep_len_mean
  ep rew mean
                      | 1.85e+03
time/
  fps
                      | 121
   iterations
                      | 603
   time elapsed
                      | 2539
   total\_timesteps
                      | 308736
train/
   approx_kl
                      0.0015622162
   clip fraction
                      0.00254
   clip_range
                      0.2
   entropy_loss
                      | -0.831
   explained_variance
                     | 0.599
   learning_rate
                      | 1e-06
   loss
                        104
   n updates
   policy_gradient_loss | -0.00225
rollout/
  ep len mean
                      1.08e+03
                      | 1.85e+03
  ep_rew_mean
time/
                      | 121
  fps
   iterations
                      | 2543
   time_elapsed
   total_timesteps
                      309248
train/
```

```
approx_kl
                      0.0015922063
                      | 0.000781
   clip_fraction
  clip_range
entropy_loss
                     | 0.2
                      | -0.894
   explained variance | 0.51
   learning_rate
                     | 1e-06
                      | 90.3
   loss
              | 6030
   n updates
   policy_gradient_loss | -0.000251
   value_loss | 295
rollout/
  ep_len_mean
                     | 1.08e+03
                      | 1.85e+03
  ep rew mean
time/
                      | 121
                     | 605
  iterations
  time_elapsed
                     | 2547
  total_timesteps
                      | 309760
train/
                      | 0.00028514536
  approx_kl
   clip_fraction
                      0.2
   clip_range
  entropy_loss
                     | -0.94
   explained_variance | 0.815
   learning_rate | 1e-06
                      | 134
   loss
   n_updates
                      6040
   policy_gradient_loss | -3.83e-05
rollout/
  ep len mean
                      | 1.08e+03
                      | 1.85e+03
  ep_rew_mean
time/
                      | 121
  fps
                    | 606
| 2553
| 310272
   iterations
  time_elapsed
  total_timesteps
train/
  approx kl
                      | 0.0006513349
  clip_fraction
   clip range
                     | 0.2
  entropy_loss | -0.945
explained_variance | 0.441
   learning_rate
                      l 1e-06
   loss
                      | 333
   n updates
                      | 6050
   policy_gradient_loss | -0.000389
   value_loss | 601
rollout/
  ep len mean
                     | 1.07e+03
                    1.84e+03
  ep_rew_mean
time/
                      | 121
  fps
  iterations
  time_elapsed | 2557
total_timesteps | 310784
train/
  approx kl
                      0.0021533743
   clip_fraction
                     | 0
                     | 0.2
   clip_range
   entropy_loss
                      | -0.756
   explained variance | 0.677
                     | 1e-06
   learning_rate
   loss
                      | 52.2
                      | 6060
   n_updates
   policy_gradient_loss | -0.000804
              | 112
   value_loss
rollout/
                    | 1.07e+03
  ep_len_mean
  ep_rew_mean
                     | 1.84e+03
time/
                      | 121
                     | 608
  iterations
   time_elapsed
                      | 2561
   total_timesteps
                      | 311296
```

```
train/
                       0.004755295
   approx_kl
   clip fraction
                       0.00605
   clip_range
                       0.2
                       1 -0.784
   entropy_loss
   explained_variance | 0.317
                        1e-06
   learning_rate
                       | 251
                       6070
   n updates
   policy_gradient_loss | -0.00283
   value_loss | 791
rollout/
                         1.08e+03
   ep len mean
                       | 1.85e+03
   ep rew mean
time/
                        121
  fps
   iterations
                         609
   time_elapsed
                        2565
   total\_timesteps
                       | 311808
train/
                         0.00029046054
   approx kl
   clip_fraction
   clip range
                       0.2
                       | -0.88
   entropy_loss
   explained variance | 0.427
                       | 1e-06
   learning_rate
                       | 188
   loss
                       | 6080
   n_updates
   policy_gradient_loss | 0.00132
   value_loss
                       | 456
rollout/
                        1.08e+03
   ep_len_mean
   ep_rew_mean
                     | 1.85e+03
time/
   fps
                       | 121
                       | 610
   iterations
                     | 2569
   time_elapsed
   total_timesteps
                       | 312320
train/
                       0.0024599081
  approx kl
   clip fraction
                       0.000977
                       0.2
   clip_range
   entropy_loss
                       | -0.859
   explained variance | 0.737
   learning_rate
                       | 1e-06
                       | 95.3
   loss
   n_updates
                       | 6090
   policy_gradient_loss | -0.00224
   value loss
                       | 446
                      | 1.08e+03
   ep_len_mean
   ep_rew_mean
                       | 1.85e+03
time/
  fps
                       | 121
   iterations
                       | 611
                       | 2573
   time elapsed
   total timesteps
                       | 312832
train/
                       | 0.0010259401
   approx_kl
                       0.00918
   clip_fraction
                       0.2
   clip_range
   entropy_loss
                       | -0.859
   explained_variance | 0.686
                       | 1e-06
   learning_rate
                       | 91.5
   loss
   n updates
                       | 6100
   policy_gradient_loss | -0.00206
   value loss
                       | 210
rollout/
   ep len mean
                       | 1.09e+03
   ep_rew_mean
                       | 1.86e+03
time/
                       | 121
   fps
   iterations
                       | 612
                       | 2578
   time_elapsed
```

```
{\tt total\_timesteps}
                      | 313344
train/
  approx kl
                      0.0054038707
                      | 0.0318
   clip_fraction
                      0.2
   clip range
                     | -0.88
   entropy_loss
   explained variance | 0.747
                      | 1e-06
   learning_rate
                      | 135
   loss
   n_updates
                      | 6110
   policy_gradient_loss | -0.000499
   value_loss
              | 256
rollout/
  ep len mean
                       1.09e + 03
  ep_rew_mean
                     | 1.86e+03
time/
  fps
  iterations
                      | 613
   time elapsed
  total_timesteps
                     | 313856
train/
                      | 0.0010240963
  approx_kl
   clip fraction
                    | 0.00527
   clip_range
                    | 0.2
   entropy_loss
                     | -0.897
   explained_variance | 0.553
   learning_rate
                      le-06
                      | 164
   loss
                      | 6120
   n_updates
   policy_gradient_loss | -0.00105
   value loss
rollout/
  ep len mean
                      | 1.08e+03
                     | 1.85e+03
  ep_rew_mean
time/
                      | 121
                     | 614
   iterations
                    | 2586
   time_elapsed
   total timesteps
                      | 314368
train/
                     0.00553589
   approx kl
   clip fraction
                     0.0336
   clip_range
                      0.2
   entropy_loss
                     -0.857
   explained_variance | 0.9
   learning_rate
                    l 1e-06
                      | 30
   loss
                      6130
   n updates
   policy_gradient_loss | -0.00645
   value loss
                      | 105
rollout/
                    | 1.08e+03
   ep len mean
   ep_rew_mean
                      | 1.85e+03
time/
                      | 121
  fps
   iterations
                      615
                     | 2590
   time_elapsed
                    314880
  total timesteps
train/
                      | 0.0055170055
  approx_kl
   clip_fraction
                      | 0.00176
   clip range
                      0.2
   entropy_loss
                     | -0.896
   explained_variance | 0.571
                      | 1e-06
   learning_rate
                      | 243
                      | 6140
   n_updates
   policy_gradient_loss | -0.00564
   value loss
                      | 861
rollout/
                      1.08e+03
  ep_len_mean
  ep_rew_mean
                      | 1.85e+03
time/
                      | 121
  fps
  iterations
                      | 616
```

```
time elapsed
                      | 2595
                      | 315392
  total_timesteps
train/
                      0.004693103
  approx_kl
                      0.0148
  clip_fraction
  clip_range
                      0.2
                      i -0.932
  entropy loss
  explained_variance
                     0.693
                      le-06
  learning_rate
                      94.9
  loss
                      | 6150
  n updates
  policy_gradient_loss | -0.00478
  value loss
rollout/
  ep len mean
                      1.85e+03
  ep rew mean
time/
                      | 121
  fps
  iterations
                      | 617
                     | 2599
  time_elapsed
  total_timesteps
                     | 315904
train/
  approx kl
                      0.0016273072
                      0.000586
  clip_fraction
  clip range
                      0.2
  entropy_loss
                      | -0.865
  explained variance | 0.586
                      | 1e-06
  learning_rate
                      | 101
  n_updates
                      6160
  policy gradient loss | -0.00136
  value loss | 245
                      | 1.08e+03
  ep_len_mean
  ep_rew_mean
                      | 1.85e+03
time/
                      | 121
                     | 618
  iterations
                     | 2603
  time_elapsed
  total_timesteps
                      316416
                      0.003729626
  approx kl
  clip_fraction
                      0.0104
  clip range
                      0.2
  entropy_loss
                      | -0.849
  explained_variance | 0.76
  learning_rate
                      | 1e-06
                      | 191
  loss
  n updates
                      | 6170
  policy_gradient_loss | -0.00466
  value_loss
                      | 507
rollout/
  ep_len_mean
                        1.08e+03
  ep rew mean
                      | 1.85e+03
time/
                        121
  fps
  iterations
                      | 619
  time elapsed
                      | 316928
  total_timesteps
train/
  approx_kl
                      | 0.00096843706
  clip_fraction
                      0.2
  clip_range
                      | -0.798
  entropy_loss
  explained_variance
                     0.702
  learning_rate
                      | 1e-06
  loss
                        71
                      6180
  n updates
  policy gradient loss | -0.00133
  value loss
                      | 1.09e+03
  ep len mean
                      | 1.85e+03
  ep_rew_mean
time/
                      | 121
  fps
```

```
iterations
                       | 620
   time_elapsed
                       | 2612
   total timesteps
                       317440
train/
                       | 0.0060216757
   approx kl
   clip_fraction
                       0.0121
   clip_range
entropy_loss
                       0.2
                       | -0.813
   explained variance | 0.789
   learning_rate
                       | 1e-06
                       | 55.6
   loss
   n_updates
                       | 6190
   policy_gradient_loss | -0.00293
                       | 170
   value_loss
   ep_len_mean
ep_rew_mean
                         1.09e+03
                       1.85e+03
time/
                       | 121
   fps
   iterations
                       | 621
   time elapsed
                         2616
   total_timesteps
                       | 317952
                       0.00061933335
   approx_kl
   clip fraction
                       | 0.000781
                       0.2
   clip_range
   entropy loss
                       | -0.839
   explained_variance | 0.714
   learning_rate
                       | 1e-06
   1055
                       1 150
                       | 6200
   n_updates
   policy_gradient_loss | 0.000366
   value loss
                       | 401
rollout/
   ep_len_mean
                       | 1.09e+03
   ep_rew_mean
                       | 1.86e+03
time/
   fps
                       | 121
                       | 622
   iterations
                       | 2620
   time elapsed
   total timesteps
                       | 318464
train/
                       0.0014972535
   approx_kl
   clip fraction
   clip_range
                       0.2
                       | -0.784
   entropy_loss
                      | 0.798
   explained_variance
   learning_rate
                       | 1e-06
   loss
                       | 118
   n updates
                       | 6210
   policy_gradient_loss | -0.00183
   value loss
rollout/
                       1.09e+03
   ep len mean
   ep_rew_mean
                       | 1.86e+03
time/
                       121
   fps
                       | 623
   iterations
   time elapsed
                      | 2624
   total_timesteps
                       | 318976
train/
   approx kl
                       0.00069507235
   clip_fraction
   clip range
                       0.2
   entropy_loss
                       | -0.912
   explained variance
                      | 0.801
   learning_rate
                       | 1e-06
                         200
   n_updates
                       6220
   policy_gradient_loss | -0.000964
   value loss
   ep_len_mean
                       | 1.08e+03
   ep_rew_mean
                       | 1.86e+03
time/
```

```
fps
                      | 121
   iterations
                      | 624
   time_elapsed
                       2628
   total_timesteps
                      | 319488
train/
                      0.00065613806
   approx_kl
   clip fraction
                      0.2
   clip_range
   entropy_loss
                      -0.806
   explained_variance | 0.785
   learning_rate
                      | 1e-06
   loss
                      1 33
                      | 6230
   n updates
   policy_gradient_loss | 0.000653
   value loss
                      | 104
rollout/
   ep len mean
                       1.08e+03
                      | 1.86e+03
   ep_rew_mean
time/
  fps
                      | 121
   iterations
                       625
   time_elapsed
                      | 2633
  total timesteps
                     320000
train/
                      0.003108176
  approx kl
   clip_fraction
                      0.00508
   clip range
                      0.2
                      | -0.742
   entropy_loss
   explained variance | 0.802
   learning_rate
                      l 1e-06
                      | 297
                      | 6240
   n updates
   policy gradient loss | -0.00243
                      | 417
   value_loss
rollout/
                      | 1.08e+03
   ep_len_mean
  ep_rew_mean
                      | 1.86e+03
time/
                      | 121
  iterations
                      | 626
  time_elapsed
                     | 2638
  total_timesteps
                     320512
train/
                      0.0010585521
  approx kl
   clip_fraction
                     0.2
   clip_range
                      | -0.725
   entropy_loss
   explained_variance | 0.794
   learning_rate
                      | 1e-06
   loss
                      | 59.5
                      | 6250
   n updates
   policy_gradient_loss | -0.000383
   value_loss
                      | 156
rollout/
                      | 1.08e+03
   ep_len_mean
  ep rew mean
                      | 1.86e+03
time/
                      121
   iterations
                     | 627
   time elapsed
                       2642
   total_timesteps
                      321024
train/
                      | 0.0031674828
  approx_kl
   clip_fraction
                     0.00488
   clip_range
                      0.2
   entropy_loss
                      | -0.801
   explained_variance | 0.81
   learning rate
                      le-06
                      93.3
   loss
   n updates
                      6260
   policy_gradient_loss | -0.00203
rollout/
  ep len mean
                      | 1.08e+03
                      | 1.86e+03
   ep_rew_mean
```

```
time/
                        121
   fps
   iterations
                        628
                        2646
   time_elapsed
                       321536
   total_timesteps
train/
                        0.0009938396
   approx kl
   clip_fraction
                       | 0.000195
   clip_range
                      0.2
   entropy_loss
                       | -0.644
   explained_variance | 0.867
                       | 1e-06
   learning_rate
                       | 50.8
   loss
                       | 6270
   n_updates
   policy_gradient_loss | -0.000972
   value_loss
                       | 175
rollout/
   ep_len_mean
                        1.08e+03
                      | 1.86e+03
  ep_rew_mean
time/
                       | 121
  fps
  iterations
                      | 629
                     | 2650
   time elapsed
  total_timesteps
                      322048
train/
                       | 0.003178238
  approx_kl
   clip fraction
                      0.000391
  clip_range
entropy_loss
                       0.2
                      | -0.703
   explained_variance | 0.46
   learning_rate
                       | 1e-06
   loss
                       i 172
   n updates
                       | 6280
   policy_gradient_loss | -0.00338
   value loss
  ep_len_mean
                      | 1.08e+03
  ep_rew_mean
                      | 1.86e+03
time/
  fps
                       i 121
  iterations
                      | 630
                      | 2655
   time elapsed
   total_timesteps
                      322560
train/
                      0.0012160189
  approx_kl
   clip_fraction
                      | 0
                      0.2
   clip_range
                       | -0.634
   entropy_loss
   explained_variance | 0.861
                     | 1e-06
   learning_rate
                       | 60.5
   loss
                      6290
   n updates
   policy_gradient_loss | -0.00105
   value loss
                       | 143
rollout/
                      1.08e+03
   ep len mean
   ep rew mean
                      | 1.86e+03
time/
                      | 121
  fps
   iterations
                     | 631
   time_elapsed
                       | 2659
  total_timesteps
                       323072
train/
   approx kl
                      0.0012031693
                      | 0.00391
   clip_fraction
   clip range
                      0.2
   entropy_loss
                      | -0.549
   explained variance | 0.922
                       l 1e-06
   learning_rate
   loss
                       | 49.3
                       | 6300
   n updates
   policy gradient loss | -0.0017
   value_loss
rollout/
                       | 1.09e+03
  ep_len_mean
```

```
ep rew mean
                        | 1.86e+03
 time/
                        121
    fps
                       | 632
    iterations
                       | 2663
    time elapsed
    total_timesteps
                      | 323584
                       0.0013835831
    approx kl
                      0.0182
    clip fraction
    clip_range
entropy_loss
                      | 0.2
                       | -0.732
    explained_variance | 0.902
    learning_rate
                       | 1e-06
                       | 53.8
    loss
    n updates
                       6310
    policy gradient loss | -0.00114
    value loss | 139
 rollout/
                       | 1.09e+03
    ep len mean
                       | 1.86e+03
    ep_rew_mean
 time/
                       | 121
   fps
                      | 633
    iterations
    time_elapsed
                    | 2667
| 324096
    total timesteps
 train/
    approx kl
                       0.0009296015
    clip_fraction
                      | 0.2
| -0.786
    clip_range
entropy_loss
    explained variance | 0.656
    learning_rate | 1e-06
    loss
                       | 102
                       | 6320
    n updates
    policy_gradient_loss | -0.00162
                | 409
    value_loss
 rollout/
                     | 1.1e+03
    ep len mean
    ep rew mean
                       | 1.86e+03
 time/
                       | 121
    fps
                     | 634
| 2671
| 324608
    iterations
    time_elapsed
    total_timesteps
 train/
    approx_kl
                       0.0012093391
                       | 0.00371
    clip_fraction
                      0.2
    clip range
                      | -0.741
    entropy_loss
    explained_variance | 0.928
                  | 1e-06
    learning_rate
                       61.8
                      | 6330
    n_updates
    policy_gradient_loss | -0.00192
    value_loss | 128
 rollout/
                     | 1.1e+03
| 1.86e+03
    ep len mean
    ep rew mean
 time/
   fps
                       | 121
    iterations
                       | 635
                     | 2676
| 325120
    time elapsed
    total_timesteps
 train/
                       0.0021892702
    approx_kl
                      0.0119
    clip fraction
    clip range
                      | 0.2
    entropy loss
                       | -0.735
    explained_variance | 0.832
                       | 1e-06
    learning_rate
                        | 266
    loss
                       | 6340
    n_updates
    policy_gradient_loss | -0.000144
    value_loss | 537
| rollout/
```

```
ep len mean
                       | 1.1e+03
                       | 1.86e+03
   ep_rew_mean
time/
                       i 121
  fps
   iterations
                       | 636
                      | 2680
   time_elapsed
   total timesteps
                      i 325632
train/
   approx kl
                       0.00078307744
   clip_fraction
   clip_range
                      | 0.2
   entropy_loss
                       | -0.754
   explained variance | 0.793
   learning_rate
                       | 1e-06
   loss
                       i 6350
   n_updates
   policy gradient loss | -0.00147
   value_loss | 180
rollout/
                       | 1.1e+03
   ep_len_mean
   ep_rew_mean
                     | 1.86e+03
time/
                      | 121
  iterations | 637
time_elapsed | 2684
total_timesteps | 326144
train/
                      0.00085953623
   approx_kl
   clip fraction
   clip_range
                      0.2
   entropy loss
                      | -0.938
   explained_variance | 0.732
   learning_rate | 1e-06
                       | 86.5
   loss
   n updates
                       | 6360
   policy_gradient_loss | 0.000542
              | 139
   value_loss
rollout/
                    | 1.11e+03
| 1.88e+03
   ep len mean
  ep_rew_mean
time/
  fps
                       121
   iterations
                      | 638
                     2688
   time elapsed
                     326656
   total_timesteps
train/
                      | 0.0027909947
   approx_kl
   clip_fraction
                      | 0.0105
   clip_range
                     | 0.2
   entropy_loss | -0.749
explained_variance | 0.851
                      | 1e-06
   learning_rate
                       | 88.1
   loss
   n updates
                       | 6370
   policy_gradient_loss | -0.0042
   value loss
rollout/
   ep_len_mean
                     | 1.11e+03
   ep_rew_mean
                     | 1.88e+03
time/
                       | 121
  fps
   iterations
                       | 639
                     | 2692
   time_elapsed
   total_timesteps
                      | 327168
train/
   approx kl
                      0.0033110727
                     | 0.0174
   clip_fraction
   clip range
                      0.2
                       | -0.949
   entropy_loss
   explained variance | 0.752
                       le-06
   learning_rate
                       | 61.3
   loss
   n updates
                       | 6380
   policy_gradient_loss | -0.000816
                       | 264
   value_loss
```

```
rollout/
                       1.11e+03
   ep len mean
  ep_rew_mean
                      | 1.87e+03
time/
  fps
                      | 121
                       640
   iterations
   time elapsed
                        2697
   total_timesteps
                      327680
                      | 0.002670609
  approx_kl
  clip fraction
                      0.00625
   clip_range
                      0.2
  entropy loss
                      | -0.696
   explained variance | 0.889
   learning rate
                      l 1e-06
                      | 83.8
  loss
  n updates
                      | 6390
   policy_gradient_loss | -0.00134
   value loss | 193
rollout/
  ep len mean
                      | 1.11e+03
  ep_rew_mean
                      | 1.87e+03
time/
                      | 121
  fps
                     | 641
   iterations
   time_elapsed
                      | 2701
  total_timesteps
                      | 328192
train/
   approx_kl
                      0.0015253928
   clip_fraction
                      0.2
   clip_range
                      | -0.996
   entropy_loss
   explained variance | 0.758
                      | 1e-06
   learning_rate
   loss
                      | 382
                      | 6400
   n updates
   policy_gradient_loss | -0.00163
   value loss
                      | 517
rollout/
  ep len mean
                      | 1.11e+03
   ep rew mean
                      | 1.87e+03
time/
                      | 121
  fps
  iterations
  time_elapsed
                    | 2705
  total_timesteps
                      | 328704
train/
                      0.002083222
  approx kl
                      0.00645
   clip_fraction
  clip_range
entropy_loss
                      0.2
                      | -0.77
   explained variance | 0.75
                      | 1e-06
  learning_rate
   loss
                      | 15.2
   n_updates
                      | 6410
   policy_gradient_loss | -0.00364
   value_loss
                     | 1.11e+03
   ep_len_mean
  ep_rew_mean
                      1.87e+03
time/
                      | 643
   iterations
                     2709
329216
   time elapsed
  total_timesteps
                      0.002942027
   approx kl
   clip fraction
                      0.0115
   clip_range
                      0.2
   entropy loss
                      -0.786
   explained_variance
                     0.767
   learning_rate
                      | 1e-06
                      143
   n updates
                      | 6420
   policy_gradient_loss | 0.000633
   value loss
              | 393
```

```
rollout/
  ep len mean
                        1.11e+03
   ep rew mean
                      | 1.87e+03
time/
                      | 121
  fps
   iterations
                      | 644
                      | 2713
   time elapsed
  total_timesteps
                     329728
train/
  approx kl
                      | 0.0012155504
   clip_fraction
                      | 0.00176
                      0.2
  clip range
   entropy_loss
                      | -0.931
   explained variance | 0.859
                       1 1e-06
  learning_rate
                       | 76.2
                      | 6430
   n_updates
   policy_gradient_loss | -0.000715
   value_loss | 327
rollout/
                       | 1.12e+03
   ep_len_mean
  ep_rew_mean
                      | 1.87e+03
time/
                      | 121
                      | 645
  iterations
  time elapsed
                     | 2719
                     | 330240
  total_timesteps
                      0.0010575684
  approx kl
                      | 0.00313
   clip fraction
                      0.2
   clip_range
   entropy loss
                      | -0.679
   explained_variance | 0.936
   learning_rate
                      | 1e-06
  loss
                      | 61.2
   n_updates
                      | 6440
   policy_gradient_loss | 0.000151
   value_loss | 172
rollout/
   ep len mean
                      | 1.12e+03
  ep_rew_mean
                     | 1.87e+03
time/
  fps
                      121
  iterations
                      | 646
                    | 2723
   time elapsed
   total_timesteps
                      | 330752
train/
                      | 0.0015819146
  approx_kl
                      | 0.00156
   clip fraction
  clip_range
entropy_loss
                      0.2
                      -0.768
   explained_variance | 0.79
   learning_rate
                      | 1e-06
   loss
                       I 132
   n updates
                       | 6450
   policy_gradient_loss | 0.000134
   value loss
                       | 296
                     | 1.12e+03
  ep_len_mean
                      | 1.87e+03
  ep_rew_mean
time/
                       | 121
  fps
   iterations
                      | 2727
   time_elapsed
   total_timesteps
                      | 331264
train/
  approx kl
                      0.00024293375
   clip fraction
                      | 0
   clip range
                      0.2
                      | -0.706
   entropy_loss
   explained variance
                      0.525
   learning_rate
                       | 1e-06
   loss
                       | 6460
   n_updates
   policy_gradient_loss | 0.000781
   value_loss
                       | 414
```

rollout/ ep_len_mean | 1.12e+03 ep_rew_mean | 1.88e+03 time/ fps | 121 | 648 iterations time elapsed 2731 331776 total_timesteps train/ | 0.0011171999 approx_kl clip_fraction | 0.000586 clip_range | 0.2 entropy_loss | -0.667 explained_variance | 0.933 learning_rate | 1e-06 loss | 53.1 n updates 6470 policy_gradient_loss | -0.000272 value loss | 109 ep_len_mean ep_rew_mean | 1.12e+03 i 1.88e+03 time/ | 121 fps iterations | 649 time_elapsed 2736 332288 total timesteps train/ approx_kl 0.0028355988 0.00996 clip_fraction clip_range entropy_loss | -0.659 explained variance | 0.88 learning_rate | 1e-06 loss | 254 6480 n_updates policy_gradient_loss | -0.00113 value_loss | 473 ep_len_mean 1.12e+03 1.88e+03 ep_rew_mean time/ | 121 fps | 650 iterations 2740 time_elapsed | 332800 total_timesteps 0.0032823666 0.0146 0.2 approx kl clip_fraction clip range entropy_loss | -0.791 explained_variance | 0.897 learning_rate | 1e-06 loss | 80.4 | 6490 n_updates policy gradient loss | -0.00405 value loss | 192 rollout/ | 1.12e+03 ep_len_mean ep_rew_mean | 1.88e+03 time/ fps | 121 iterations | 651 time_elapsed | 2744 total_timesteps | 333312 train/ 0 0026569306 approx kl clip fraction 0.00254 clip_range entropy_loss | 0.2 | -0.798 explained_variance | 0.923 learning_rate | 1e-06 | 106 n updates policy_gradient_loss | -0.00211

value_loss	198
rollout/	
ep len mean	1.12e+03
ep rew mean	1.88e+03
time/	i i
fps	121
iterations	652
<pre> time_elapsed total timesteps</pre>	2748 333824
train/	555024
approx kl	0.00071439403
clip_fraction	0
clip_range	0.2
entropy_loss	-0.864
<pre> explained_variance learning rate</pre>	0.55 1e-06
l loss	114
n_updates	6510
' ',_'	-0.000582
value_loss	504
rollout/	
ep_len_mean	1.12e+03
ep_rew_mean	1.88e+03
time/	
fps	121
iterations time elapsed	653 2752
total timesteps	334336
train/	
approx_kl	0.00044095737
clip_fraction	0
clip_range	0.2 -0.703
<pre> entropy_loss explained variance </pre>	-0.765
learning_rate	l 1e-06
loss	41.9
n_updates	6520
. , ,_,	-0.000831
value_loss	140
rollout/	
ep_len_mean	1.13e+03
ep_rew_mean	1.88e+03
time/ fps	
iterations	121 654
time_elapsed	2757
total_timesteps	334848
train/	
approx_kl clip fraction	0.0010236399 0
clip_rraction	0.2
entropy_loss	-0.769
explained_variance	0.844
learning_rate	le-06
loss	121
<pre> n_updates policy gradient loss </pre>	6530 -0.00129
value loss	219
	· · · - · · · · · · · · · · · · · · · ·
rollout/	
ep_len_mean	1.13e+03 1.88e+03
ep_rew_mean time/	1.005703
fps	121
iterations	655
time_elapsed	2761
total_timesteps	335360
train/	ı I

46.3

6540

0.006787844 0.0297 0.2 -0.912 0.856 1e-06

| train/

loss

n_updates

anny
approx_kl
clip_fraction
clip_range
entropy_loss
explained_variance
learning_rate

```
policy_gradient_loss | -0.0054
   value_loss | 233
                      | 1.13e+03
   ep_len_mean
  ep_rew_mean
                    | 1.88e+03
time/
                      | 121
  fps
                     | 656
  iterations
                    | 2765
| 335872
   time elapsed
   total_timesteps
train/
                      0.0060339067
  approx_kl
                     | 0.0148
   clip fraction
  clip_range
entropy_loss
                     0.2
                     | -0.877
   explained_variance | 0.867
   learning_rate | 1e-06
   loss
                      | 80.3
  n updates
                      | 6550
   policy_gradient_loss | -0.00633
   value_loss | 227
rollout/
  ep len mean
                      | 1.13e+03
  ep_rew_mean
                     | 1.88e+03
time/
  fps
                      | 121
   iterations
                      | 657
                    | 2769
| 336384
  time elapsed
  total_timesteps
train/
  approx kl
                      | 0.0012373383
   clip_fraction
   clip range
                     | 0.2
  entropy_loss | -0.918
explained_variance | 0.898
                      | 1e-06
   learning_rate
   loss
                      | 126
   n updates
                      | 6560
   policy gradient loss | -0.00138
   value_loss | 252
rollout/
  ep_len_mean
                      | 1.13e+03
  ep_rew_mean
                    | 1.88e+03
time/
  fps
                      | 121
                     | 658
  iterations
                    2774
   time_elapsed
                     | 336896
  total_timesteps
train/
                      | 0.0016621108
  approx kl
   clip_fraction
                    | 0
  clip_range
                    | 0.2
   entropy_loss
                      | -0.816
   explained variance | 0.91
                     | 1e-06
   learning_rate
                      52.1
   loss
   n_updates
                      | 6570
   policy gradient loss | -0.000976
                      | 121
   value loss
rollout/
                     | 1.13e+03
   ep_len_mean
   ep_rew_mean
                      | 1.88e+03
time/
                      | 121
                    | 659
   iterations
  time_elapsed
                     | 2778
```

total_timesteps

clip_fraction
clip_range

entropy_loss

explained_variance
learning_rate

approx_kl

train/

loss

| 337408

| 0.00313

0.2

| -0.91 | 0.923

| 1e-06 | 55.2

0.0015167953

<pre> n_updates policy_gradient_loss </pre>	6580 -0.00133
value_loss	177
rollout/	l I
ep_len_mean	1.13e+03 1.88e+03
<pre> ep_rew_mean time/</pre>	1.00e+05
fps	121
iterations time elapsed	660 2782
total_timesteps	337920
train/	
approx_kl clip_fraction	0.0017471804 0.00586
clip_range	0.2
entropy_loss	-0.775
<pre> explained_variance learning rate</pre>	0.933 1e-06
•	99
	6590
<pre>policy_gradient_loss value loss</pre>	-0.00211
	I
rollout/	
ep_len_mean	
ep_rew_mean	1.89e+03
time/ fps	
iterations	661
time_elapsed	2786
<pre> total_timesteps train/</pre>	338432
approx_kl	0.002617102
clip_fraction	0.0191
<pre> clip_range entropy loss</pre>	0.2 -0.9
	0.767
learning_rate	le-06
loss n updates	67.8 6600
-: - <u>-</u> -:	-0.00368
value_loss	159
rollout/	
<pre> ep_len_mean ep rew mean</pre>	1.14e+03 1.89e+03
time/	
fps	121
iterations time elapsed	662 2791
total_timesteps	338944
train/	
approx_kl clip fraction	0.00089293986 0
clip_range	0.2
entropy_loss	-0.938
<pre> explained_variance learning rate</pre>	0.394 1e-06
loss	460
. – .	6610
<pre>policy_gradient_loss value loss</pre>	-0.000347
	I
rollout/	
ep_len_mean	
ep_rew_mean	1.89e+03
time/	
fps iterations	663
time_elapsed	2795
<pre> total_timesteps train/</pre>	339456
1	ı

. | 0 0.2 | -0.978 | 0.691 l 1e-06

0.002903217

train/

ann/
approx_kl
clip_fraction
clip_range
entropy_loss
explained_variance
learning_rate

```
loss
                       | 133
                       | 6620
   n_updates
   policy_gradient_loss | -0.00182
                      | 297
   value loss
rollout/
   ep_len_mean
                        1.14e+03
  ep_rew_mean
                       | 1.89e+03
time/
  fps
                        121
                       | 664
  iterations
  time elapsed
                       | 2799
  total_timesteps
                       | 339968
train/
                       0.0020570369
  approx_kl
   clip fraction
                       0.000195
                       0.2
   clip_range
   entropy_loss
                       | -0.885
   explained_variance
                      0.894
                       | 1e-06
   learning_rate
                       | 43.4
   n updates
                       | 6630
   policy_gradient_loss | 0.000336
   value loss
                       | 148
rollout/
                        1.15e+03
  ep len mean
                       | 1.91e+03
  ep_rew_mean
time/
                       I 121
  fps
  iterations
                       | 665
   time_elapsed
                     | 2804
   total timesteps
                       340480
train/
  approx kl
                       0.0020878506
                       | 0.000195
   clip_fraction
   clip_range
                       0.2
   entropy_loss
                       | -0.884
   explained_variance | 0.469
                       | 1e-06
   learning_rate
                        169
   n_updates
                       1 6640
   policy gradient loss | -0.00189
                       373
   value loss
  ep_len_mean
                       | 1.15e+03
  ep_rew_mean
                       | 1.91e+03
time/
  fps
                        121
   iterations
                        666
   time_elapsed
                       | 2809
  total_timesteps
                       340992
train/
  approx_kl
                       | 0.0013474176
   clip_fraction
                       0.2
   clip_range
   entropy_loss
                       | -0.804
   explained_variance
                      0.522
                       | 1e-06
   learning_rate
                       97.3
   loss
   n updates
                       | 6650
   policy_gradient_loss | -0.00151
   value_loss
rollout/
   ep_len_mean
                        1.15e+03
                       | 1.91e+03
  ep_rew_mean
time/
                        121
  fps
                       | 667
   iterations
   time_elapsed
                       | 2813
                       | 341504
  total_timesteps
train/
                       0.0009956871
   approx_kl
   clip fraction
                       0.000781
                       0.2
   clip_range
   entropy loss
                        -0.808
   explained_variance
                      | 0.396
```

learning_rate	1e-06
loss	259
n_updates	6660
<pre>policy_gradient_loss</pre>	-0.00187 754
value_loss	754
rollout/	
ep_len_mean	1.15e+03 1.91e+03
<pre>ep_rew_mean time/</pre>	1.91e+05
fps	
iterations	668
time_elapsed	2817
total_timesteps	342016
train/	
approx_kl	0.0036461027
<pre>clip_fraction clip_range</pre>	0.0041 0.2
entropy loss	-0.923
<u> </u>	0.871
	l 1e-06
loss	60.8
n_updates	6670
	-0.00129
value_loss	153
rollout/	
ep_len_mean	1.16e+03
ep_rew_mean	1.92e+03
time/	
fps iterations	121 669
time elapsed	2821
total timesteps	342528
train/	
approx_kl	0.006664481
clip_fraction	0.0592
clip_range	0.2
entropy_loss	-0.683
<pre>explained_variance learning rate</pre>	0.908 1e-06
loss	55.5
n_updates	6680
policy_gradient_loss	-0.00663
value_loss	153
rollout/	l I
ep len mean	 1.16e+03
ep_rew_mean	1.92e+03
time/	
fps	121
iterations	670
<pre>time_elapsed total timesteps</pre>	2825 343040
train/	
approx_kl	0.0019151563
clip_fraction	0.00605
clip_fraction clip_range	0.00605 0.2
<pre>clip_fraction clip_range entropy_loss</pre>	0.00605 0.2 -0.747
clip_fraction clip_range entropy_loss explained_variance	0.00605 0.2 -0.747 0.543
clip_fraction clip_range entropy_loss explained_variance learning_rate	0.00605 0.2 -0.747 0.543 1e-06
clip_fraction clip_range entropy_loss explained_variance	0.00605 0.2 -0.747 0.543
clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates	0.00605 0.2 -0.747 0.543 1e-06 691
clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss	0.00605
clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss	0.00605
clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss	0.00605
clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss	0.00605
clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean	0.00605
clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss	0.00605
clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean	0.00605
clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations	0.00605
clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed	0.00605
clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps	0.00605
clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/	0.00605 0.2 0.747 0.543 1e-06 691 6690 -0.00106 926
clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx kl	0.00605 0.2 0.747 0.543 1e-06 691 6690 -0.00106 926
clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction	0.00605 0.2 0.747 0.543 1e-06 691 6690 -0.00106 926

learning_rate loss	0.658
rollout/	1 1602
ep_len_mean ep rew mean	1.16e+03 1.92e+03
ep_rew_mean time/	1.92e+05
fps	121
iterations	672
time_elapsed	2834
total_timesteps train/	344064
approx kl	0.0029860726
clip_fraction	0.00391
clip_range	0.2
' ''=	-0.761
<pre> explained_variance learning rate</pre>	0.866 1e-06
loss	148
n_updates	6710
policy_gradient_loss	
value_loss	320
rollout/	
ep_len_mean	1.16e+03
ep_rew_mean	1.91e+03
time/ fps	
iterations	121 673
time_elapsed	2838
total_timesteps	344576
train/	
approx_kl clip fraction	0.0015073636 0.00273
clip_range	0.00273
entropy_loss	-0.659
explained_variance	0.892
learning_rate loss	1e-06 38.1
n updates	6720
policy_gradient_loss	
value_loss	112
rollout/	
ep len mean	1.16e+03
ep_rew_mean	1.91e+03
time/	
fps iterations	121 674
time_elapsed	2842
total_timesteps	345088
train/	i i
approx_kl	0.003238246
<pre> clip_fraction clip range</pre>	0.0158 0.2
• • •	-0.722
	0.637
1 3_	1e-06
•	407
<pre> n_updates policy_gradient_loss </pre>	6730 -0 00264
value_loss	783
rollout/ ep len mean	 1.16e+03
ep_ten_mean ep rew mean	1.16e+03
time/	
fps	121
iterations	675
<pre> time_elapsed total timesteps</pre>	2846 345600
totat_timesteps	000C+C
approx_kl	0.0013262474
clip_fraction	0.000391
clip_range	0.2

loss n_updates policy_gradient_loss	-0.761
rollout/	
ep_len_mean	1.16e+03
ep_rew_mean	1.91e+03
time/	
fps iterations	121 676
time elapsed	2851
total timesteps	346112
train/	
approx_kl	0.0019088398
<pre> clip_fraction</pre>	0.000781
clip_range	0.2
entropy_loss	-0.855
<pre> explained_variance</pre>	0.901
learning_rate	1e-06
loss	83.2 6750
<pre> n_updates policy_gradient_loss</pre>	6750 -0.00068
value loss	151
Vacac_coss	
rollout/	
ep_len_mean	1.16e+03
ep_rew_mean	1.91e+03
time/	
fps	121
iterations time elapsed	677 2855
total timesteps	346624
train/	540024
approx kl	0.0011952773
clip_fraction	0.00117
clip_range	0.2
entropy_loss	-0.934
<pre> explained_variance</pre>	0.941
learning_rate	1e-06
loss	53.3
n_updates	6760
<pre>policy_gradient_loss value loss</pre>	-0.001/9
rollout/	
ep_len_mean	
ep_len_mean ep_rew_mean	1.16e+03 1.91e+03
ep_len_mean ep_rew_mean time/	1.91e+03
ep_len_mean ep_rew_mean time/ fps	1.91e+03
ep_len_mean ep_rew_mean time/ fps iterations	1.91e+03
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed	1.91e+03 121 678 2859
ep_len_mean ep_rew_mean time/ fps iterations	1.91e+03
<pre>ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps</pre>	1.91e+03 121 678 2859
<pre>ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/</pre>	1.91e+03
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range	1.91e+03
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss	1.91e+03
<pre>ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance</pre>	1.91e+03
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance	1.91e+03
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate	1.91e+03
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates	1.91e+03
<pre>ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss</pre>	1.91e+03
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates	1.91e+03
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss	1.91e+03
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss	1.91e+03
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean	1.91e+03
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean	1.91e+03
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/	1.91e+03
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps	1.91e+03
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations	1.91e+03 121 678 2859 347136 0.0013377822 0.00391 0.2 -0.851 0.845 1e-06 48.9 6770 -0.00092 117 1.16e+03 1.91e+03 121 679
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed	1.91e+03 121 678 2859 347136 0.0013377822 0.00391 0.2 -0.851 0.845 1e-06 48.9 6770 -0.00092 117 1.16e+03 1.91e+03 1.21 679 2863
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations	1.91e+03
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps	1.91e+03 121 678 2859 347136 0.0013377822 0.00391 0.2 -0.851 0.845 1e-06 48.9 6770 -0.00092 117 1.16e+03 1.91e+03 1.21 679 2863
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/	1.91e+03 121 678 2859 347136 0.0013377822 0.00391 0.2 -0.851 0.845 1e-06 48.9 6770 -0.00092 117 1.16e+03 1.91e+03 121 679 2863 347648

clip range	0.2
entropy_loss	-0.803
	!
<pre> explained_variance</pre>	0.86
learning_rate	1e-06
lloss	58.6
n updates	i 6780 i
policy_gradient_loss	
value_loss	117
rollout/	1
•	
ep_len_mean	1.16e+03
ep_rew_mean	1.91e+03
time/	l I
fps	i 121 i
	680
iterations	
time_elapsed	2868
<pre>total_timesteps</pre>	348160
train/	l I
approx kl	0.004532385
–	
clip_fraction	0.0281
clip_range	0.2
entropy loss	-0.746
explained variance	0.887
	!
learning_rate	1e-06
loss	71.3
n_updates	6790
policy_gradient_loss	-0.00361
	226
Vacue_coss	220
rollout/	l I
ep len mean	1.16e+03
	1.91e+03
ep_rew_mean	1.916+03
time/	
fps	121
iterations	681
time elapsed	2872
total_timesteps	348672
train/	l I
approx_kl	0.0016238367
clip fraction	0.000586
clip range	0.2
entropy_loss	-0.804
<pre> explained_variance</pre>	0.768
learning rate	le-06
loss	i 105
•	
n_updates	6800
<pre>policy_gradient_loss</pre>	0.000139
value_loss	359
rollout/	
•	
ep_len_mean	 1.16e+03
•	 1.16e+03 1.91e+03
ep_len_mean ep_rew_mean	
ep_len_mean ep_rew_mean time/	1.91e+03
ep_len_mean ep_rew_mean time/ fps	1.91e+03 121
ep_len_mean ep_rew_mean time/ fps iterations	1.91e+03 121 682
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed	1.91e+03 121 682 2876
ep_len_mean ep_rew_mean time/ fps iterations	1.91e+03 121 682
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed	1.91e+03 121 682 2876
<pre>ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/</pre>	1.91e+03 121 682 2876 349184
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl	1.91e+03 121 682 2876 349184 0.000889961
<pre>ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction</pre>	1.91e+03 121 682 2876 349184 0.000889961
<pre>ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range</pre>	1.91e+03
<pre>ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss</pre>	1.91e+03 121 682 2876 349184 0.000889961
<pre>ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss</pre>	1.91e+03
<pre>ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance</pre>	1.91e+03
<pre>ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate</pre>	1.91e+03
<pre>ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss</pre>	1.91e+03
<pre>ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates</pre>	1.91e+03
<pre>ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates</pre>	1.91e+03
<pre>ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss</pre>	1.91e+03
<pre>ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates</pre>	1.91e+03
<pre>ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss</pre>	1.91e+03
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss	1.91e+03
<pre>ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss</pre>	1.91e+03
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss	1.91e+03
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean	1.91e+03
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean	1.91e+03
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/	1.91e+03
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps	1.91e+03
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations	1.91e+03
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations	1.91e+03
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time elapsed	1.91e+03
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps	1.91e+03
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/	1.91e+03 121 682 2876 349184 0.000889961 0
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps	1.91e+03

```
clip_fraction
                      | 0.00156
   clip_range
                      0.2
   entropy_loss
                      | -0.755
   explained_variance | 0.755
   learning_rate
                      | 1e-06
                      | 89.9
   n updates
                      | 6820
   policy_gradient_loss | 0.000741
   value loss | 483
rollout/
  ep len mean
                      | 1.16e+03
                      | 1.91e+03
  ep_rew_mean
time/
                      1 121
  fps
  iterations
                    | 2886
  time elapsed
  total timesteps
                     350208
train/
                      | 0.0013132914
  approx kl
   clip_fraction
                      | 0.00137
  clip_range
entropy_loss
                      0.2
                     | -0.858
   explained variance | 0.703
                    | 1e-06
   learning_rate
                      | 74.6
                      | 6830
  n_updates
   policy_gradient_loss | -0.00141
   value_loss
              | 219
  ep_len_mean
                     | 1.16e+03
  ep_rew_mean
                      | 1.91e+03
time/
  fps
                      | 121
                      | 685
  iterations
                     2890
350720
   time_elapsed
  total_timesteps
                      | 0.0012979885
  approx_kl
   clip fraction
                      | 0.00195
                     0.2
   clip range
   entropy loss
                     | -0.735
   explained_variance | 0.717
   learning_rate | 1e-06
   loss
                      | 51
                     | 6840
   n_updates
   policy_gradient_loss | -0.000547
   value_loss | 118
rollout/
                      | 1.17e+03
  ep_len_mean
  ep rew mean
                      | 1.91e+03
time/
  fps
                      | 121
   iterations
                      | 686
   time elapsed
  total_timesteps
                      | 351232
train/
                      0.0045356248
   approx_kl
   clip fraction
                     0.0129
   clip_range
                     0.2
                      -0.837
   entropy_loss
   explained_variance | 0.89
   learning_rate
                      | 1e-06
   loss
                      | 48.3
                      | 6850
   n updates
   policy_gradient_loss | -0.0047
rollout/
  ep len mean
                      1.17e+03
                      | 1.91e+03
  ep_rew_mean
time/
                      | 121
  fps
   iterations
                      | 2898
   time_elapsed
   total_timesteps
                      | 351744
train/
```

<pre>approx_kl clip_fraction clip_range entropy_loss explained_variance</pre>	
clip_range entropy_loss	0.00072773837
entropy_loss	0
	0.2
<pre> explained_variance </pre>	-0.815
	0.784
learning_rate	1e-06
loss	195
n_updates	6860
<pre>policy_gradient_loss </pre>	-0.00041
value_loss	398
rollout/	
ep_len_mean	1.17e+03
ep_rew_mean	1.91e+03
time/	
fps	121
iterations	688
time_elapsed	2903
total_timesteps	352256
train/	0.0011694841
approx_kl clip fraction	0.0011094841
clip_rraction	0.2
entropy_loss	-0.857
explained_variance	0.708
learning rate	1e-06
l loss	63
n updates	6870 I
policy_gradient_loss	
value_loss	171
,	
rollout/	1
ep len mean	1.17e+03
ep_rew_mean	1.91e+03
time/	į
fps	121
iterations	689
time_elapsed	2907
total_timesteps	352768
train/	
approx_kl	0.005263097
clip_fraction	0.024
clip_range	0.2
entropy_loss	-0.792
explained_variance	0.136
learning_rate	1e-06
loss	164
n_updates	6880
policy_gradient_loss	
value_loss	419
rollout/	I
	!
The state of the s	1 19e+03
ep_len_mean	1.19e+03 1.94e+03
The state of the s	1.19e+03 1.94e+03
ep_len_mean ep_rew_mean time/	1.94e+03
ep_len_mean ep_rew_mean	
ep_len_mean ep_rew_mean time/ fps	1.94e+03 121
ep_len_mean ep_rew_mean	1.94e+03 121 690
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed	1.94e+03 121 690 2911
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps	1.94e+03 121 690 2911
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps	1.94e+03
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range	1.94e+03 121 690 2911 353280 0.0010914596 0 0.2
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss	1.94e+03 121 690 2911 353280 0.0010914596 0 0.2 -0.884
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance	1.94e+03 121 690 2911 353280 0.0010914596 0 0.2 -0.884 0.81 1
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate	1.94e+03 121 690 2911 353280 0.0010914596 0 0.2 -0.884 0.81 1e-06
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate	1.94e+03 121 690 2911 353280 0.0010914596 0 0.2 -0.884 0.81 1e-06 149 1
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates	1.94e+03 121 690 2911 353280 0.0010914596 0 0.2 -0.884 0.81 1e-06 149 6890 0
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss	1.94e+03 121 690 2911 353280 0.0010914596 0 0.2 -0.884 0.81 1e-06 149 6890 -0.00144
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates	1.94e+03 121 690 2911 353280 0.0010914596 0 0.2 -0.884 0.81 1e-06 149 6890 -0.00144
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss	1.94e+03 121 690 2911 353280 0.0010914596 0 0.2 -0.884 0.81 1e-06 149 6890 -0.00144
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss	1.94e+03 121 690 2911 353280 0.0010914596 0 0.2 -0.884 0.81 1e-06 149 6890 -0.00144
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss	1.94e+03 121 690 2911 353280 0.0010914596 0 0.2 -0.884 0.81 1e-06 149 6890 -0.00144 429
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean	1.94e+03 121 690 2911 353280 0.0010914596 0 0.2 -0.884 0.81 1e-06 149 6890 -0.00144 429 1.19e+03
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean	1.94e+03 121 690 2911 353280 0.0010914596 0 0.2 -0.884 0.81 1e-06 149 6890 -0.00144 429
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/	1.94e+03 121 690 2911 353280 0.0010914596 0 0.2 -0.884 0.81 1e-06 149 6890 -0.00144 429 1.19e+03 1.94e+03
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps	1.94e+03 121 690 2911 353280 0.0010914596 0 0.2 -0.884 0.81 1e-06 149 6890 -0.00144 429 1.19e+03 1.94e+03 121
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations	1.94e+03 121 690 2911 353280 0.0010914596 0 0.2 -0.884 0.81 1e-06 149 6890 -0.00144 429 1.19e+03 1.94e+03 121 691
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps	1.94e+03 121 690 2911 353280 0.0010914596 0 0.2 -0.884 0.81 1e-06 149 6890 -0.00144 429 1.19e+03 1.94e+03 121

```
train/
                        0.0007737499
   approx_kl
   clip fraction
                       | 0
                       0.2
   clip_range
                       | -0.82
   entropy_loss
   explained_variance | 0.922
   learning_rate
                       | 1e-06
                       | 55.7
                      6900
   n updates
   policy_gradient_loss | -0.00213
   value_loss | 202
rollout/
                        1.19e+03
   ep len mean
                       | 1.94e+03
   ep rew mean
time/
                       | 121
  fps
   iterations
                       | 692
   time_elapsed
                       | 2920
                       354304
   total_timesteps
train/
                       | 0.002658925
   approx kl
   clip_fraction
                      0.00723
   clip range
                      0.2
                       | -0.804
   entropy_loss
   explained variance | 0.802
                      | 1e-06
   learning_rate
                       80.1
   loss
                       | 6910
   n_updates
   policy_gradient_loss | -0.0029
                       | 187
   value_loss
rollout/
                       | 1.19e+03
   ep_len_mean
   ep_rew_mean
                      | 1.94e+03
time/
  fps
                       | 121
   iterations
                      | 693
                     | 2924
   time_elapsed
   total_timesteps
                      | 354816
train/
  approx kl
                       0.0005247978
   clip fraction
                       0.2
   clip range
   entropy_loss
                       | -0.813
   explained variance | 0.75
   learning_rate
                       | 1e-06
                       | 97.9
   loss
   n_updates
                       | 6920
   policy_gradient_loss | 4.21e-06
   value_loss
                       | 234
   ep_len_mean
                      | 1.19e+03
   ep_rew_mean
                      | 1.94e+03
time/
  fps
                       | 121
   iterations
                       | 694
                      | 2928
   time elapsed
   total timesteps
                       | 355328
train/
                      | 0.001353583
   approx_kl
   clip_fraction
                      0.00273
   clip_range
                       0.2
   entropy_loss
                       | -0.786
   explained_variance | 0.901
                       | 1e-06
   learning_rate
   loss
                       | 88.5
   n updates
                       | 6930
   policy_gradient_loss | -0.00512
   value loss
                       | 194
rollout/
   ep len mean
                       | 1.18e+03
   ep_rew_mean
                       | 1.93e+03
time/
                       | 121
  fps
   iterations
                       | 695
                       2933
   time_elapsed
```

```
{\tt total\_timesteps}
                      355840
train/
  approx kl
                      0.0045257816
                      0.0107
   clip_fraction
                      0.2
   clip range
                     | -0.781
   entropy_loss
   explained_variance | 0.914
  learning_rate
                      | 1e-06
                      58.3
   loss
   n_updates
                      | 6940
   policy_gradient_loss | -0.00185
   value_loss
              | 133
rollout/
  ep_len_mean
ep_rew_mean
                      | 1.18e+03
                    1.93e+03
time/
  fps
                      | 696
  iterations
                    | 2937
   time elapsed
  total_timesteps
                     | 356352
train/
                      | 0.0041963565
  approx_kl
                    0.00137
   clip fraction
  clip_range
entropy_loss
                    | 0.2
                      | -0.84
   explained_variance | 0.795
   learning_rate
                      le-06
                      | 151
  loss
                      | 6950
   n_updates
   policy_gradient_loss | -0.00392
   value loss
rollout/
  ep len mean
                      | 1.18e+03
                      | 1.93e+03
  ep_rew_mean
time/
                      | 121
                     | 697
   iterations
                    | 2941
   time_elapsed
  total timesteps
                      356864
train/
                      0.0032854457
   approx kl
   clip fraction
                     0.0406
                      0.2
   clip_range
   entropy_loss
                     .
| -0.807
   explained_variance | 0.869
   learning_rate | 1e-06
   loss
                      | 68.6
   n updates
                      | 6960
   policy_gradient_loss | -0.00489
   value loss
                      | 173
rollout/
                    | 1.18e+03
  ep len mean
   ep_rew_mean
                      | 1.93e+03
time/
                      | 121
  fps
   iterations
                      698
                    | 2945
| 357376
   time_elapsed
  total timesteps
train/
                      | 0.0014696104
  approx_kl
   clip_fraction
   clip range
                      0.2
   entropy_loss
                      | -0.754
   explained_variance | 0.856
                      | 1e-06
   learning_rate
                      | 83.5
                      | 6970
   n_updates
   policy_gradient_loss | -0.000779
   value_loss
                      | 228
rollout/
  ep_len_mean
                      | 1.19e+03
  ep_rew_mean
time/
                      | 121
  fps
                      | 699
  iterations
```

```
time elapsed
                      | 2949
  total_timesteps
                      | 357888
train/
                      0.0002868973
  approx_kl
  clip fraction
                      0.2
  clip_range
                      i -0.728
  entropy loss
  explained_variance
                     0.866
                      le-06
  learning_rate
                      | 89.4
  loss
                      | 6980
  n updates
  policy_gradient_loss | -0.000403
  value loss
rollout/
  ep len mean
                      1.94e+03
  ep rew mean
time/
                      | 121
  fps
  iterations
                     | 2954
  time_elapsed
  total_timesteps
                      | 358400
train/
  approx kl
                      0.0025417448
  clip_fraction
                      | 0.2
  clip range
  entropy_loss
                      | -0.818
  explained variance | 0.74
                      | 1e-06
  learning_rate
                        368
  n_updates
                      i 6990
  policy gradient loss | -0.0022
  value_loss | 525
                      | 1.19e+03
  ep_len_mean
  ep_rew_mean
                      | 1.94e+03
time/
                      | 121
                     | 701
  iterations
                     | 2958
  time_elapsed
  total_timesteps
                      358912
                      0.0025555016
  approx kl
  clip_fraction
                      | 0.0123
  clip range
                      0.2
  entropy_loss
                      | -0.811
  explained_variance | 0.681
  learning_rate
                      | 1e-06
                      69.4
  loss
  n updates
                      | 7000
  policy_gradient_loss | -7.69e-05
  value_loss
                      | 212
rollout/
                      | 1.19e+03
  ep_len_mean
  ep_rew_mean
                      | 1.94e+03
time/
                        121
  fps
                      702
  iterations
  time elapsed
                     | 359424
  total_timesteps
train/
                      0.0039825873
  approx_kl
  clip_fraction
                      0.0187
  clip_range
                      0.2
  entropy_loss
                      | -0.927
  explained_variance | 0.729
  learning_rate
                      | 1e-06
  loss
                        200
                        7010
  n updates
  policy gradient loss | -0.00262
  value loss
                      | 1.19e+03
  ep len mean
                      | 1.94e+03
  ep_rew_mean
time/
                      | 121
  fps
```

```
iterations
                       | 703
   time_elapsed
                         2966
   total timesteps
                        359936
train/
                       0.001782494
   approx kl
   clip_fraction
                       | 0.0143
                       0.2
   clip range
   entropy_loss
                       | -1.06
   explained variance
                      -0.616
                       | 1e-06
   learning_rate
                         16.5
   loss
   n_updates
                       1 7020
   policy_gradient_loss | 0.000705
   value_loss
                       | 69.7
   ep len mean
                        1.21e+03
   ep rew mean
                       1.97e+03
time/
                       | 121
  fps
   iterations
                        704
   time elapsed
                         2973
   total_timesteps
                       | 360448
                        0.0010105585
   approx_kl
   clip fraction
   clip_range
                       0.2
   entropy loss
                       -0.938
   explained_variance
                       0.73
   learning_rate
                        1e-06
   loss
                       i 157
   n_updates
                       | 7030
   policy_gradient_loss | 0.000376
   value loss
                       | 406
rollout/
   ep_len_mean
                       | 1.21e+03
   ep_rew_mean
                       | 1.97e+03
time/
  fps
                        121
   iterations
                        705
                       2977
   time elapsed
   total_timesteps
                       360960
train/
                       0.0023585502
   approx_kl
   clip fraction
                       0.000195
   clip_range
                       0.2
   entropy_loss
                       | -1.06
   explained_variance
                      | 0.891
   learning_rate
                       | 1e-06
   loss
                       | 167
   n updates
                        7040
   policy_gradient_loss | -0.000737
   value loss
rollout/
   ep len mean
                       | 1.21e+03
   ep_rew_mean
                       | 1.96e+03
time/
                       121
   fps
   iterations
                       | 2981
   time_elapsed
   total_timesteps
                       361472
train/
   approx kl
                       0.001786804
   clip_fraction
   clip range
                       0.2
   entropy_loss
                       | -0.796
   explained variance
                      0.585
   learning_rate
                       | 1e-06
                         94.7
   n_updates
                       7050
   policy_gradient_loss | -0.00274
                       | 180
   value loss
                       | 1.21e+03
   ep_len_mean
   ep_rew_mean
                       | 1.96e+03
time/
```

```
fps
                      | 121
                      | 707
   iterations
   time_elapsed
                      2985
   total_timesteps
                      361984
train/
                      | 0.0013539298
   approx_kl
   clip fraction
                      0.00625
   clip_range
                      0.2
   entropy_loss
                      | -0.773
   explained_variance | 0.779
   learning_rate
                      | 1e-06
   loss
                      1 456
                      | 7060
   n updates
   policy_gradient_loss | -0.0031
   value loss
rollout/
   ep len mean
                        1.21e+03
  ep_rew_mean
                      | 1.95e+03
time/
  fps
                      | 121
   iterations
                       708
                     2990
   time elapsed
                    362496
  total timesteps
train/
                      0.0027609882
  approx kl
   clip_fraction
                      0.00273
   clip range
                      0.2
                      | -0.9
   entropy_loss
   explained_variance | 0.915
   learning_rate
                      l 1e-06
                      | 25.5
   n updates
                      | 7070
   policy gradient loss | -0.000708
   value_loss | 86.8
rollout/
  ep_len_mean
                      | 1.21e+03
  ep_rew_mean
                      | 1.95e+03
time/
                      | 121
                      | 709
  iterations
                     | 2994
  time_elapsed
  total_timesteps
                     363008
train/
                      0.0033666287
  approx kl
   clip_fraction
                      0.00937
   clip_range
                      0.2
   entropy_loss
                      | -0.769
   explained_variance | 0.733
   learning_rate
                      | 1e-06
   loss
                       169
                      7080
   n updates
   policy_gradient_loss | 0.00216
   value_loss | 508
rollout/
                      | 1.21e+03
  ep_len_mean
  ep rew mean
                      | 1.95e+03
time/
                      121
                     | 710
   iterations
   time elapsed
                        2998
   total_timesteps
                      | 363520
train/
                      | 0.0003845034
  approx_kl
   clip fraction
   clip_range
                      0.2
   entropy_loss
                      | -0.608
   explained_variance | 0.74
   learning rate
                      l 1e-06
   loss
                      65.5
   n updates
                      7090
   policy_gradient_loss | -0.000589
rollout/
  ep len mean
                      | 1.21e+03
                      | 1.96e+03
   ep_rew_mean
```

```
time/
                        121
   fps
   iterations
                        711
                        3002
   time_elapsed
                       1 364032
   total_timesteps
train/
                        0.0015482297
   approx kl
                       0.00293
   clip_fraction
   clip_range
                       0.2
   entropy_loss
                       | -0.948
   explained_variance | 0.382
   learning_rate
                       | 1e-06
                       | 213
   loss
                       | 7100
   n_updates
   policy_gradient_loss | 0.000573
                       | 632
   value loss
rollout/
   ep_len_mean
                        1.21e+03
                      | 1.96e+03
  ep_rew_mean
time/
                        121
  fps
  iterations
                       | 712
                      | 3007
   time elapsed
  total_timesteps
                      1 364544
train/
                       | 0.0006743681
  approx_kl
   clip fraction
                       0.2
   clip_range
   entropy loss
                       | -1.06
   explained variance | 0.514
   learning_rate
                       | 1e-06
   loss
                       i 367
   n updates
                        7110
   policy_gradient_loss | 0.00108
   value loss
  ep_len_mean
                      | 1.22e+03
  ep_rew_mean
                      | 1.96e+03
time/
  fps
                       i 121
                      | 713
  iterations
   time elapsed
                      | 3011
   total_timesteps
                      365056
train/
                      0.0057302085
  approx_kl
                     0.0355
   clip_fraction
   clip_range
                      0.2
                      | -0.75
   entropy_loss
   explained_variance | 0.835
                      l 1e-06
   learning_rate
                       | 148
   loss
                       7120
   n updates
   policy_gradient_loss | -0.00497
   value loss
                       | 273
rollout/
                      1.22e+03
   ep len mean
   ep rew mean
                       | 1.96e+03
time/
                      | 121
  fps
   iterations
                        714
                       | 3015
   time_elapsed
  total_timesteps
                       | 365568
train/
   approx kl
                      0.0020005123
                      0.00527
   clip_fraction
   clip range
                      0.2
   entropy_loss
                       | -1.1
   explained variance | 0.896
                       l 1e-06
   learning_rate
   loss
                       | 61.3
                       | 7130
   n updates
   policy gradient loss | -0.0029
   value_loss
rollout/
                       | 1.22e+03
  ep_len_mean
```

```
ep rew mean
                        | 1.96e+03
 time/
                         121
    fps
                       | 715
    iterations
                       | 3019
    time elapsed
    total_timesteps
                       366080
                       | 0.0022788914
    approx_kl
    clip fraction
                      0.00352
    clip_range
entropy_loss
                      | 0.2
                       | -0.93
    explained_variance | 0.789
    learning_rate
                       | 1e-06
                       | 72.2
    loss
    n updates
                       7140
    policy_gradient_loss | -0.00201
    value loss
 rollout/
    ep len mean
                       | 1.22e+03
                       | 1.96e+03
    ep_rew_mean
 time/
                       | 121
    fps
                      | 716
    iterations
    time_elapsed
                     | 3024
    total timesteps
                       366592
 train/
    approx kl
                       | 0.0014171526
                      0.00176
    clip_fraction
    clip_range
entropy_loss
                       0.2
                      -1.05
    explained variance | 0.651
    learning_rate | 1e-06
    loss
                       | 177
                       7150
    n_updates
    policy_gradient_loss | 0.00128
                | 570
    value_loss
 rollout/
                      | 1.22e+03
    ep len mean
    ep rew mean
                       | 1.96e+03
 time/
                       | 121
    fps
                       | 717
    iterations
                     | 3028
| 367104
    time_elapsed
    total timesteps
 train/
                       | 0.0035626763
    approx_kl
                       | 0.00781
    clip_fraction
                       0.2
    clip range
                      | -1.1
    entropy_loss
    explained variance | 0.872
                       | 1e-06
    learning_rate
                       | 7160
    n_updates
    policy_gradient_loss | -0.00305
    value_loss | 304
 rollout/
                      1.22e+03
1.97e+03
    ep len mean
    ep rew mean
 time/
   fps
                       | 121
    iterations
                       | 718
    time elapsed
                      | 3032
                      | 367616
    total_timesteps
 train/
                       0.0063592335
    approx_kl
    clip fraction
                      | 0.0287
    clip range
                      | 0.2
    entropy loss
                       | -0.989
    explained_variance | 0.877
    learning_rate
                       le-06
                       | 58.3
    loss
                       | 7170
    n_updates
    policy_gradient_loss | -0.0051
    value loss | 145
| rollout/
```

```
ep len mean
                     | 1.22e+03
  ep_rew_mean
                     | 1.97e+03
time/
                     i 121
  fps
  iterations
                     719
  time_elapsed
                       3036
  total timesteps
                       368128
train/
  approx kl
                     0.0012484491
                     0.00449
  clip_fraction
  clip range
                     0.2
  entropy_loss
                     | -0.926
  explained variance | 0.494
                     | 1e-06
  learning_rate
                     1 409
  n_updates
                     i 7180
  policy gradient loss | -0.000436
  value loss | 723
rollout/
                      1.22e+03
  ep_len_mean
  ep_rew_mean
                    | 1.97e+03
time/
                     | 121
                    | 720
  iterations
                   3040
  time_elapsed
  total_timesteps
                     368640
train/
                     0.00450158
  approx kl
  clip fraction
                     | 0.0176
                     0.2
  clip_range
                     -0.868
  entropy loss
  explained_variance | 0.861
  learning_rate | 1e-06
                     | 26
  loss
  n updates
                    | 7190
  policy_gradient_loss | -0.000272
  value_loss | 140
rollout/
  ep len mean
                     | 1.22e+03
  ep_rew_mean
                     1.97e+03
time/
                     121
  fps
                     721
  iterations
  time elapsed
                     369152
  total_timesteps
train/
                     0.008191551
  approx_kl
  clip_fraction
                     0.0748
  clip_range
                     0.2
                     | -1.03
  entropy loss
  explained variance | 0.926
  learning_rate
                     l 1e-06
                     42.6
  loss
  n updates
                     | 7200
  policy_gradient_loss | -0.0122
  value loss
                 | 116
```

rollout/	1
ep_len_mean	1.22e+03
ep_rew_mean	1.97e+03
time/	I
fps	121
iterations	722
time_elapsed	3049
total_timesteps	369664
train/	
approx_kl	0.0009620555
clip_fraction	0
clip_range	0.2
entropy_loss	-1.01
<pre> explained_variance </pre>	0.772
learning_rate	1e-06
loss	123
n_updates	7210
<pre>policy_gradient_loss </pre>	0.00145
value_loss	283

```
rollout/
                       1.22e+03
  ep len mean
  ep_rew_mean
                      | 1.97e+03
time/
  fps
                      | 121
                      | 723
  iterations
  time elapsed
                       3054
                      | 370176
  total_timesteps
                     | 0.010181965
  approx_kl
  clip_fraction
                     | 0.0361
                     0.2
  clip_range
  entropy loss
                     | -1.1
  explained variance | 0.925
  learning_rate | 1e-06
                      1 95.1
  loss
                      | 7220
  n updates
  policy_gradient_loss | -0.00696
  value loss | 182
rollout/
  ep_len_mean
ep_rew_mean
                     | 1.22e+03
                      | 1.97e+03
time/
                     | 121
  fps
                    724
  iterations
  time_elapsed
                     | 3059
  total_timesteps
                      370688
train/
                     0 0038648578
  approx_kl
                    0.00937
  clip_fraction
                    | 0.2
  clip_range
                     | -1.03
  entropy_loss
  explained variance | 0.429
                      l 1e-06
  learning_rate
  loss
                      | 146
                     | 7230
  n_updates
  policy_gradient_loss | -0.00373
                      | 368
  value_loss
rollout/
                      | 1.22e+03
  ep len mean
  ep_rew_mean
                     | 1.97e+03
time/
                     | 121
  fps
  iterations
  time_elapsed
                    | 3064
  total timesteps
                    371200
train/
                     0.0022645984
  approx kl
                     0.00664
  clip_fraction
  clip_range
                     0.2
  entropy_loss
                     | -1.43
  explained variance | 0.785
                      | 1e-06
  learning_rate
  loss
                      | 364
                      | 7240
  n_updates
  policy_gradient_loss | 0.00374
  value_loss
                      | 739
                    | 1.22e+03
  ep len mean
  ep_rew_mean
                     | 1.97e+03
time/
  fps
                       726
  iterations
  time elapsed
                       3068
                    371712
  total_timesteps
                      | 0.0016592628
  approx_kl
  clip fraction
  clip_range
                      0.2
  entropy loss
                      | -1.86
  explained_variance
                     | -1.99
  learning_rate
                      | 1e-06
                      0.176
  n_updates
                      | 7250
  policy_gradient_loss | -0.00185
  value loss | 1.57
```

```
rollout/
  ep len mean
                       1.22e+03
  ep_rew_mean
                     | 1.97e+03
time/
                      | 121
  fps
                     727
   iterations
   time_elapsed
                     | 3072
                    372224
  total_timesteps
train/
  approx kl
                     | 0.0011556109
   clip_fraction
  clip range
                     0.2
   entropy_loss
                      | -1.87
   explained variance | -0.728
                      l 1e-06
  learning_rate
                      0.15
                      | 7260
   n_updates
   policy_gradient_loss | -0.00187
   value_loss | 1.09
rollout/
                      | 1.22e+03
   ep_len_mean
  ep_rew_mean
                     | 1.97e+03
time/
                     | 121
                     | 728
  iterations
  time elapsed
                    3076
                    372736
  total_timesteps
                     0.00018471165
  approx_kl
   clip fraction
                     | 0.2
   clip_range
   entropy loss
                     | -1.88
   explained_variance | -0.687
   learning_rate
                     | 1e-06
                      | 0.136
  loss
   n_updates
                     | 7270
   policy_gradient_loss | -8.57e-05
   value_loss | 0.754
rollout/
  ep len mean
                     | 1.22e+03
  ep_rew_mean
                    1.97e+03
time/
  fps
                     | 121
                     | 729
  iterations
                  3081
   time elapsed
   total_timesteps
                     373248
train/
                     | 0.00013651501
  approx_kl
   clip fraction
                     0.2
   clip_range
   entropy loss
                    | -1.87
   explained_variance | -0.975
   learning_rate | 1e-06
   loss
                      0.112
   n updates
                      | 7280
   policy_gradient_loss | -0.000177
   value loss
                      0.909
rollout/
                    | 1.22e+03
  ep_len_mean
ep_rew_mean
                     | 1.97e+03
time/
  fps
                      | 121
   iterations
                     3085
   time_elapsed
   total_timesteps
                    | 373760
train/
                     0.00045266398
  approx kl
   clip_fraction
                     | 0
   clip range
                     0.2
                      | -1.87
   entropy_loss
   explained variance
                     | -0.398
                      i 1e-06
   learning_rate
   loss
                      0.101
                      | 7290
   n_updates
   policy_gradient_loss | -0.00115
   value_loss
                      0.36
```

rollout/ ep_len_mean | 1.22e+03 ep_rew_mean i 1.97e+03 time/ fps | 121 | 731 iterations | 3089 | 374272 time elapsed total_timesteps train/ approx_kl | 0.0004438759 | 0 clip_fraction clip_range
entropy_loss | 0.2 entropy_loss | -1.86 explained_variance | -0.791 l 1e-06 learning_rate 0.228 loss n updates 7300 policy_gradient_loss | -0.00174 value_loss | 0.607 ep_len_mean ep_rew_mean | 1.22e+03 | 1.97e+03 time/ | 121 fps iterations time_elapsed | 3094 | 374784 total timesteps train/ 0.00056295376 approx_kl clip_fraction | 0 0.2 clip_range entropy_loss explained variance | -1.22 learning_rate | 1e-06 0.0828 7310 n_updates policy_gradient_loss | -0.00144 value_loss | 0.32 ep_len_mean ep_rew_mean | 1.22e+03 | 1.97e+03 time/ | 121 fps | 733 iterations 3098 time_elapsed total_timesteps 375296 0.00043654453 0 0.2 approx kl clip_fraction clip range entropy_loss | -1.85 explained_variance | -0.543 learning_rate | 1e-06 loss 0.0683 7320 n_updates policy gradient loss | -0.000931 value loss 0.219

rollout/ | 1.22e+03 ep_len_mean ep_rew_mean | 1.97e+03 time/ fps | 121 | 734 iterations time_elapsed | 3102 total_timesteps | 375808 train/ approx kl 0.000118380645 clip fraction | 0 clip_range entropy_loss | 0.2 | -1.84 explained_variance | -0.0414 | 1e-06 learning_rate 0.0855 n updates | 7330

policy_gradient_loss | -0.000384

value_loss	0.28
rollout/	
<pre> ep_len_mean ep rew mean</pre>	1.22e+03 1.97e+03
time/	1.976+05
fps	121
iterations	735
time_elapsed	3106
<pre> total_timesteps train/</pre>	376320
approx kl	0.00025230297
clip_fraction	0
clip_range	0.2
<pre> entropy_loss explained variance </pre>	-1.83 -0.624
learning rate	1e-06
loss	0.163
	7340
1 1 2 3 3 3 3 4 7 1	-0.000983 0.463
value_loss	0.403
rollout/	
ep_len_mean	1.22e+03
ep_rew_mean time/	1.97e+03
fps	121
iterations	736
time_elapsed	3110
<pre> total_timesteps train/</pre>	376832
approx kl	
clip_fraction	i 0
clip_range	0.2
<pre> entropy_loss explained variance </pre>	-1.83 0.0719
learning rate	1e-06
loss	0.149
n_updates	7350
	-0.00155 0.265
value_loss	
rollout/	
<pre> ep_len_mean ep rew mean</pre>	1.22e+03 1.97e+03
time/	
fps	121
iterations	737
<pre> time_elapsed total timesteps</pre>	3115 377344
train/	
approx_kl	0.00020550494
clip_fraction	0
<pre> clip_range entropy_loss</pre>	0.2 -1.83
entropy_toss explained_variance	-0.0829
learning_rate	le-06
loss	0.122
<pre> n_updates policy gradient loss </pre>	7360 -0.000774
value loss	-0.000774
	1
111 /	
rollout/ ep_len_mean	 1.22e+03
ep_ten_mean	1.22e+03
time/	
fps	121
iterations	738
<pre> time_elapsed total timesteps</pre>	3119 377856
totat_timesteps train/	

0 0.2 | -1.83 0.0165 l 1e-06

0.155

7370

0.0002790084

loss

n_updates

ann/
approx_kl
clip_fraction
clip_range
entropy_loss
explained_variance
learning_rate

```
policy_gradient_loss | -0.000915
   value_loss | 0.248
                     | 1.22e+03
   ep_len_mean
  ep_rew_mean
                    | 1.97e+03
time/
                     | 121
  fps
  iterations
                    | 739
                    | 3123
   time elapsed
                     378368
   total_timesteps
train/
                     | 0.00022675842
  approx_kl
   clip fraction
                     0.2
   clip range
  entropy_loss
                    | -1.83
   explained variance | -0.0394
   learning_rate | 1e-06
   loss
                      0.16
  n updates
                     | 7380
   policy_gradient_loss | -0.000643
   value_loss | 0.275
rollout/
                   1.32e+03
1.99e+03
  ep len mean
  ep_rew_mean
time/
                      | 121
  fps
                     | 740
  iterations
                    | 3127
| 378880
  time elapsed
  total_timesteps
train/
                     2.8665527e-05
  approx kl
                    | 0
   clip_fraction
   clip range
                    0.2
  entropy_loss | -1.83
explained_variance | 0.567
                     | 1e-06
   learning_rate
   loss
                      0.252
                     | 7390
   n updates
   policy gradient loss | 0.000177
   value_loss | 0.441
rollout/
  ep_len_mean
ep_rew_mean
                     | 1.32e+03
                    i 1.99e+03
time/
  fps
                      | 121
                     | 741
  iterations
                    3131
   time_elapsed
                    | 379392
  total_timesteps
train/
                     | 0.0041224877
  approx kl
   clip_fraction
                    | 0.000195
                    | 0.2
   clip_range
   entropy_loss
                     | -1.3
   explained_variance | 0.976
                    | 1e-06
   learning_rate
                      36.5
   loss
                     7400
   n_updates
   policy gradient loss | -0.00227
                      | 76.6
   value loss
rollout/
                     | 1.32e+03
   ep_len_mean
   ep_rew_mean
                     | 1.99e+03
time/
                     | 121
```

| 742

| 3136

| 0

0.2

| -1.2

| -1.02

| 1e-06 | 6.86

379904

0.0028824133

iterations
time_elapsed

approx_kl
clip_fraction

train/

loss

total_timesteps

clip_range

entropy loss

explained_variance

learning_rate

n_updates	7410
policy_gradient_loss value loss	33.4
rollout/	
ep_len_mean	1.32e+03
ep_rew_mean	1.99e+03
time/	
fps iterations	121 743
time_elapsed	3141
total_timesteps	380416
train/ approx kl	 0.0013492847
approx_kt clip_fraction	0.0013492847
clip_range	0.2
entropy_loss	-1.18
·	-0.876 1e-06
loss	4.71
n_updates	7420
policy_gradient_loss	
value_loss	27.3
rollout/	
ep_len_mean ep rew mean	1.32e+03 1.99e+03
time/	1.550.05
fps	121
iterations	744
<pre> time_elapsed total timesteps</pre>	3145 380928
train/	
approx_kl	0.002380813
<pre> clip_fraction clip_range </pre>	0 0.2
	-1.19
explained_variance	-0.595
learning_rate	1e-06
loss n updates	3.69 7430
policy_gradient_loss	-0.00262
value_loss	16.5
rollout/	
ep_len_mean	1.32e+03
ep_rew_mean time/	1.99e+03
fps	
iterations	745
time_elapsed	3149
<pre> total_timesteps train/</pre>	381440
approx_kl	0.0012168199
clip_fraction	0
clip_range	0.2
<pre> entropy_loss explained variance</pre>	-1.22 -1.13
learning_rate	le-06
loss	5.16
n_updates	7440 -0.000516
<pre>policy_gradient_loss value loss</pre>	15.9
rollout/	
rollout/ ep_len_mean	 1.32e+03
ep_rew_mean	1.99e+03
time/	į į
fps iterations	121 746
time elapsed	746
total_timesteps	381952
train/	

0.003170816 0.0186 0.2 | -1.2 | -0.376 l 1e-06

| train/

ann/
approx_kl
clip_fraction
clip_range
entropy_loss
explained_variance
learning_rate

loss n_updates policy_gradient_loss value loss	2.67 7450 -0.00431 11.1
rollout/	
ep_len_mean	1.32e+03
ep_rew_mean	1.99e+03
time/	
fps	121
iterations	747
time_elapsed	3158
total_timesteps	382464
train/	
approx_kl	0.0012422239
clip_fraction	0
clip_range	0.2
entropy_loss	-1.21
explained_variance	0.792
learning_rate	1e-06
loss	62.9
n_updates	7460
policy_gradient_loss	
value_loss	134
L rollout/	
rollout/	
ep_len_mean	1.35e+03
ep_rew_mean	1.99e+03
time/	
fps	121
iterations	748
time_elapsed	3162
total_timesteps	382976
train/	
approx_kl	0.013870377
clip_fraction	0.067
clip_range	0.2
entropy_loss	-1.13
explained_variance	0.875
learning_rate	1e-06
loss	66.9
n_updates	7470
<pre>policy_gradient_loss value loss</pre>	-0.000516 212
vacue_coss	212
rollout/	1 1
ep_len_mean	1.35e+03
ep rew mean	1.99e+03
time/	1.550.05
fps	121
iterations	
time_elapsed	3166
total timesteps	383488
train/	,
approx kl	0.0026377959
clip_fraction	0.0020377333
clip range	0.00137
entropy_loss	-1.29
explained variance	0.439
learning_rate	1e-06
loss	232
n updates	7480
policy_gradient_loss	0.00197
value_loss	703
	·
	:
rollout/	 1.35e+03
rollout/ ep_len_mean	
rollout/ ep_len_mean ep_rew_mean	
rollout/ ep_len_mean ep_rew_mean time/	1.99e+03
rollout/ ep_len_mean ep_rew_mean time/ fps	1.99e+03
rollout/ ep_len_mean ep_rew_mean time/ fps iterations	1.99e+03
rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed	1.99e+03
rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps	1.99e+03
rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps	1.99e+03
rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl	1.99e+03
rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction	1.99e+03
rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range	1.99e+03
rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction	1.99e+03

```
learning_rate
                     | 1e-06
  n_updates
                      | 43.7
                      7490
  policy_gradient_loss | -0.00135
  value_loss | 149
  ep_len_mean
ep_rew_mean
                      | 1.35e+03
                    | 1.99e+03
time/
  fps
                      | 121
                     | 751
  iterations
  time elapsed
                    | 3175
  total timesteps
                    384512
train/
                     0.00048624235
  approx kl
  clip_fraction
                    | 0
  clip_range
entropy_loss
                     | 0.2
                     | -1.12
  explained_variance | 0.893
                    | 1e-06
  learning_rate
                      | 62.8
  loss
                    7500
  n_updates
  policy_gradient_loss | 0.000157
  value_loss | 227
rollout/
                    | 1.35e+03
  ep_len_mean
  ep rew mean
                     | 1.99e+03
time/
                     | 121
                    | 752
  iterations
                    | 3179
  time_elapsed
                      | 385024
  total_timesteps
train/
                    | 0.000769572
  approx_kl
  clip_fraction
                    0 0.2
  clip_range
entropy_loss
                    | -1.24
  explained_variance | 0.949
  learning_rate | 1e-06
                     | 57.8
  loss
  n updates
                      | 7510
  policy_gradient_loss | -2.27e-05
  value_loss
                      | 128
rollout/
                      | 1.36e+03
  ep_len_mean
                      | 2e+03
  ep_rew_mean
time/
  fps
                     | 121
                     | 753
  iterations
                    | 3183
| 385536
  time elapsed
  total_timesteps
train/
  approx_kl
                     0.00022084685
  clip fraction
                     | 0
                     | 0.2
  clip_range
  entropy_loss
                     | -1.16
  explained variance | 0.9
                      l 1e-06
  learning_rate
                      97.6
  n updates
                      | 7520
  policy_gradient_loss | -0.000561
  value loss
rollout/
  ep len mean
                     | 2e+03
  ep_rew_mean
time/
                      | 121
  fps
  iterations
                    | 3187
  time_elapsed
  total_timesteps
                     | 386048
train/
                      | 0.0010289596
  approx kl
                     | 0.000195
  clip_fraction
  clip range
                      0.2
                      | -1.24
  entropy_loss
```

explained_variance learning_rate	0.92 1e-06
loss	39.4
n_updates	7530
<pre>policy_gradient_loss</pre>	0.000848
value_loss	236
	.
rollout/	
ep_len_mean	1.36e+03
ep_rew_mean	2e+03
time/	
fps iterations	121 755
time elapsed	733 3192
total timesteps	386560
train/	İ
approx_kl	0.00014886563
clip_fraction	0
1 1 3	0.2 -1.08
1 17=	-1.08 0.802
learning_rate	1e-06
	81.1
n_updates	7540
policy_gradient_loss	
value_loss	154
rollout/	l I
ep_len_mean	1.36e+03
ep_rew_mean	2e+03
time/	
fps	121
<pre> iterations time elapsed</pre>	756 3196
total timesteps	387072
train/	
approx_kl	0.005019926
clip_fraction	0
clip_range	0.2
I Antrony Locc	-1.32
entropy_loss	
<pre> explained_variance</pre>	0.852
<pre> explained_variance learning_rate</pre>	0.852 1e-06
<pre> explained_variance</pre>	0.852
<pre> explained_variance learning_rate loss</pre>	0.852 1e-06 49.3 7550
explained_variance learning_rate loss n_updates	0.852 1e-06 49.3 7550
<pre> explained_variance learning_rate loss n_updates policy_gradient_loss</pre>	0.852 1e-06 49.3 7550 -0.00284
explained_variance learning_rate loss n_updates policy_gradient_loss value_loss	0.852 1e-06 49.3 7550 -0.00284
<pre> explained_variance learning_rate loss n_updates policy_gradient_loss value_loss</pre> rollout/	0.852 1e-06 49.3 7550 -0.00284
explained_variance learning_rate loss n_updates policy_gradient_loss value_loss	0.852 1e-06 49.3 7550 -0.00284 214
<pre> explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean</pre>	0.852 1e-06 49.3 7550 -0.00284 214
<pre> explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps</pre>	0.852 1e-06 49.3 7550 -0.00284 214 1.36e+03 2e+03
<pre> explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations</pre>	0.852 1e-06 49.3 7550 -0.00284 214 1.36e+03 2e+03 121 757
<pre> explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed</pre>	0.852 1e-06 49.3 7550 -0.00284 214 1.36e+03 2e+03 121 757 3200
<pre> explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps</pre>	0.852 1e-06 49.3 7550 -0.00284 214 1.36e+03 2e+03 121 757
<pre> explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed</pre>	0.852 1e-06 49.3 7550 -0.00284 214 1.36e+03 2e+03 121 757 3200
<pre> explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction</pre>	0.852 1e-06 49.3 7550 -0.00284 214 1.36e+03 2e+03 211 757 3200 387584
<pre> explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range</pre>	0.852
<pre> explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss</pre>	0.852 1e-06 49.3 7550 -0.00284 214 1.36e+03 2e+03 2121 757 3200 387584 0.00341463 0 0.2 -1.27
<pre> explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance</pre>	0.852
<pre> explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate</pre>	0.852
<pre> explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss</pre>	0.852
explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates	0.852
<pre> explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss</pre>	0.852
explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss	0.852 1e-06 49.3 7550 -0.00284 214 1.36e+03 2e+03 121 757 3200 387584 0.00341463 0 0.2 -1.27 0.908 1e-06 72.4 7560 -0.00197
explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss	0.852 1e-06 49.3 7550 -0.00284 214 1.36e+03 2e+03 121 757 3200 387584 0.00341463 0 0.2 -1.27 0.908 1e-06 72.4 7560 -0.00197
<pre> explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss</pre>	0.852 1e-06
<pre> explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss</pre> rollout/ ep_len_mean	0.852 1e-06 49.3 7550 -0.00284 214 1.36e+03 2e+03 121 757 3200 387584 0.00341463 0 0.2 -1.27 0.908 1e-06 72.4 7560 -0.00197
<pre> explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss</pre>	0.852 1e-06
<pre> explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss</pre> rollout/ ep_len_mean ep_rew_mean time/ fps	0.852 1e-06
<pre> explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss</pre> rollout/ ep_len_mean ep_rew_mean time/ fps iterations	0.852
<pre> explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss</pre> rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed	0.852 1e-06 49.3 7550 -0.00284 214 1.36e+03 2e+03 121 757 3200 387584 0.00341463 0 0.2 -1.27 0.908 1e-06 72.4 7560 -0.00197 194 1.36e+03 2e+03 121 758 3204
explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time/ fps iterations time_elapsed total_timesteps	0.852
<pre> explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss</pre> rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/	0.852 1e-06 49.3 7550 -0.00284 214 1.36e+03 2e+03 121 757 3200 387584 0.00341463 0 0.2 -1.27 0.908 1e-06 72.4 7560 -0.00197 194 1.36e+03 2e+03 121 758 3204 388096
explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl	0.852 1e-06 49.3 7550 -0.00284 214 1.36e+03 2e+03 121 757 3200 387584 0.00341463 0 0.2 -1.27 0.908 1e-06 72.4 7560 -0.00197 194 1.36e+03 2e+03 121 758 3204
<pre> explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss</pre> rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/	0.852 1e-06 49.3 7550 -0.00284 214 1.36e+03 2e+03 121 757 3200 387584 0.00341463 0.2 -1.27 0.908 1e-06 72.4 7560 -0.00197 194

| explained_variance | 0.92 |

entropy_loss	
	0.865
learning_rate	1e-06
loss	54.9
n_updates	7570
<pre>policy_gradient_loss </pre>	0.000791
	128
rollout/	
ep_len_mean	1.38e+03
ep_rew_mean	2e+03
time/	
fps	121
iterations	759
time_elapsed	3208
total_timesteps	388608
train/	
approx_kl	0.00124691
clip_fraction	0
clip_range	0.2
entropy_loss	-1.01
explained_variance	0.865
learning_rate	1e-06
loss	37.2
n_updates	7580
policy_gradient_loss	
value_loss	118
L rollout/	
rollout/	1 200102
ep_len_mean	1.38e+03
ep_rew_mean	2e+03
time/	101
fps	121
iterations	760
time_elapsed	3213
total_timesteps	389120
train/	0.007201642
approx_kl	0.007391642
clip_fraction	0.0197
clip_range	0.2
entropy_loss	-1.23
explained_variance	0.73
learning_rate	1e-06
loss	527
n_updates	7590
	0.00111
value_loss	685
rollout/	
ep_len_mean	1.38e+03
ep rew mean	2e+03
time/	20.03
l fps	121
iterations	761
time_elapsed	3217
total_timesteps	389632
train/	
approx_kl	0.0036347895
clip_fraction	0.0030347033
clip range	0.2
entropy_loss	-1.13
explained variance	0.136
learning_rate	1e-06
l loss	3.33
n updates	7600
policy_gradient_loss	
	25.4
_ ' '	
rollout/	1
ep_len_mean	1.39e+03
ep_rew_mean	2e+03
time/	Ĺ
j fps j	121
iterations	762
time_elapsed	3222
total_timesteps	390144
train/	į
i approx_kl	0.003049279
clip_fraction	0

	0.2	
	-1.06	
• • •	-1.61	
learning_rate	1e-06	
loss	13	
. – .	7610	
policy_gradient_loss		
value_loss	29	
rollout/	l	
ep len mean	1.39e+03	
ep rew mean	2e+03	
time/		
fps	121	
iterations	763	
time elapsed	3226	
total_timesteps	390656	
train/	1	
approx_kl	0.0019700187	
• •=	0.00352	
' ' '	0.2	
	-1.27	
	0.885	
learning_rate	1e-06	
loss	124	
. – .	7620	
policy_gradient_loss	0.000926 211	
value_loss	Z11	
rollout/	<u> </u>	
ep len mean	1.39e+03	
ep rew mean	2e+03	
time/	i	
fps	121	
iterations	764	
time_elapsed	3230	
total_timesteps	391168	
train/	I	
approx_kl	0.026889306	
clip_fraction	0.234	
clip_range	0.2	
entropy_loss	-1.27	
explained_variance	0.957	
learning_rate	1e-06	
loss	10.3	
	7630	
policy_gradient_loss		
· –	64.8	
rollout/		
ep_len_mean	1.39e+03	
ep rew mean	2e+03	
time/		
fps	121	
	765	
time_elapsed	3235	
total_timesteps	391680	
train/	j	
approx_kl	0.001206666	
clip_fraction	0	
	0.2	
entropy_loss	-1.21	
	-1.25	
learning_rate	1e-06	
loss	2.1	
	7640	
policy_gradient_loss		
value_loss	17.7	
rollout/		
ep_len_mean	1.39e+03	
ep rew mean	2e+03	
time/		
fps	121	
iterations	766	
•	3239	
total timesteps	392192	
train/	j	
approx_kl	0.012851706	

clip_fraction	0.0412
clip range	0.2
	-1.17
_ : _ : _ : : _ : : : _ : : : : : : : :	0.948
_ : _ · · . = .	le-06
l loss	32.7
n updates	7650
policy_gradient_loss	
value_loss	152
mallau+/	
rollout/	
ep_len_mean	1.39e+03
ep_rew_mean	2e+03
time/	
fps	121
iterations	767
time_elapsed	3243
total_timesteps	392704
train/	
approx_kl	0.0033274665
clip_fraction	0.000586
clip_range	0.2
· · · · · · · · · · · · · · · · · · ·	-1.03
· : : : : : : : : : : : : : : : : : : :	0.853
· · · · · · · · · · · · · · · · · · ·	le-06
: - :	122
	7660
. – .	-0.000438
value_loss	247
1	
rollout/	
ep_len_mean	1.4e+03
ep_rew_mean	2e+03
time/	
fps	121
iterations	768
time_elapsed	3248
total_timesteps	393216
train/	İ
l approx kl	0.003848706 i
I ADDIOX KL I	
approx_kl clip fraction	0.003040700
clip_fraction	0
clip_fraction clip_range	0
clip_fraction clip_range entropy_loss	0.2
clip_fraction clip_range entropy_loss explained_variance	0 0.2 -1.13 0.978
clip_fraction clip_range entropy_loss explained_variance learning_rate	0 0.2 -1.13 0.978 1e-06
clip_fraction clip_range entropy_loss explained_variance learning_rate loss	0 0
clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates	0 0 0
clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss	0 0 0 0 0 0 0 0 0 0
clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates	0 0 0
clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss	0 0 0 0 0 0 0 0 0 0
clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss	0 0 0 0 0 0 0 0 0 0
clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss	0 0.2 -1.13 0.978 1e-06 25.7 7670 -0.00433 72.7
clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean	0 0.2 -1.13 0.978 1e-06 25.7 7670 -0.00433 72.7 -1.39e+03
clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean	0 0.2 -1.13 0.978 1e-06 25.7 7670 -0.00433 72.7
clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/	0 0.2 -1.13 0.978 1e-06 25.7 7670 -0.00433 72.7 -1.39e+03 2e+03
clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps	0 0.2 -1.13 0.978 1e-06 25.7 7670 -0.00433 72.7
clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations	0 0.2 -1.13 0.978 1e-06 25.7 7670 -0.00433 72.7
clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations lime_elapsed	0 0.2 -1.13 0.978 1e-06 25.7 7670 -0.00433 72.7
clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations	0 0.2 -1.13 0.978 1e-06 25.7 7670 -0.00433 72.7
clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations lime_elapsed	0 0.2 -1.13 0.978 1e-06 25.7 7670 -0.00433 72.7
clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl	0 0.2 -1.13 0.978 1e-06 25.7 7670 -0.00433 72.7
clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl	0 0.2 -1.13 0.978 1e-06 25.7 7670 -0.00433 72.7
clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction	0 0.2 -1.13 0.978 1e-06 25.7 7670 -0.00433 72.7
clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range	0
clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss	0
clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance	0
clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate	0
clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss	0
clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates	0
clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss	0
clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss	0
clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss	0
clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss	0
clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/	0
clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean	0
clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean	0
clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/	0
clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps	0
clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/	0
clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_loss iterations time_loss iterations time/ fps iterations time/ fps iterations time/ fps iterations time_elapsed	0
clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps itime/ fps iterations	0
clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_loss iterations time_loss iterations time/ fps iterations time/ fps iterations time/ fps iterations time_elapsed	0

learning_rate loss n_updates	0.00066387304 0
rollout/ ep_len_mean ep_rew_mean time/ fps iterations	1.39e+03
<pre> time_elapsed total timesteps</pre>	3260 394752
train/	
<pre>approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss</pre>	0.0008495792 0
rollout/	 I I
ep_len_mean	1.4e+03
ep_rew_mean	1.99e+03
time/ fps	 121
iterations	772
time_elapsed	3265
total_timesteps	395264
train/ approx kl	 0.00042401464
clip_fraction	0
clip_range	0.2
entropy_loss	-0.836
<pre> explained_variance learning rate</pre>	-1.65 1e-06
loss	23.2
n_updates	7710
<pre>policy_gradient_loss value loss</pre>	-0.00131 65.8
rollout/ ep_len_mean ep_rew_mean time/	
fps	
iterations	773
<pre> time_elapsed total timesteps</pre>	3269 395776
train/	333770
approx_kl	0.0066706985
<pre> clip_fraction clip_range</pre>	0.0281 0.2
entropy loss	-1.04
explained_variance	0.821
learning_rate	1e-06 352
loss n updates	332 7720
	-0.00319
	709
rollout/	l I
ep_len_mean	1.4e+03
ep_rew_mean time/	1.99e+03
fps	121
iterations	774
<pre> time_elapsed total_timesteps</pre>	3273 396288

```
train/
                        0.0034855688
   approx_kl
   clip fraction
                       | 0
                       0.2
   clip_range
                       | -1.27
   entropy_loss
   explained_variance | 0.977
   learning_rate
                       | 1e-06
                       | 17
                      7730
   n updates
   policy_gradient_loss | -0.00167
   value_loss | 52.7
rollout/
                        1.4e+03
   ep len mean
                       | 1.99e+03
  ep rew mean
time/
                        121
  fps
   iterations
                        775
   time_elapsed
                        3277
  total_timesteps
                       396800
train/
                        0.0011316184
   approx kl
   clip_fraction
   clip range
                       0.2
                       | -0.999
   entropy_loss
   explained variance | 0.768
                       | 1e-06
   learning_rate
                       17.4
   loss
                       | 7740
   n_updates
   policy_gradient_loss | -0.00116
                       71.2
   value_loss
rollout/
                       | 1.4e+03
  ep_len_mean
   ep_rew_mean
                     | 1.99e+03
time/
  fps
                       | 121
                       | 776
  iterations
                      | 3281
   time_elapsed
  total_timesteps
                      | 397312
train/
  approx kl
                       0.0005037687
   clip fraction
                       0.2
   clip_range
   entropy_loss
                       | -0.955
   explained variance | -0.218
   learning_rate
                       | 1e-06
                       | 3.69
   loss
   n_updates
                        7750
   policy_gradient_loss | -0.00032
   value loss
                       | 11.8
   ep_len_mean
                      | 1.42e+03
  ep_rew_mean
                      | 1.99e+03
time/
  fps
                       | 121
   iterations
                       | 777
   time elapsed
                        3286
   total timesteps
                       397824
train/
                       | 0.0061881915
   approx_kl
                      0.0367
   clip_fraction
   clip_range
                       0.2
   entropy_loss
                       | -0.909
   explained_variance | 0.84
                        1e-06
   learning_rate
   loss
                       | 78.1
   n updates
                       | 7760
   policy_gradient_loss | -0.00276
   value loss
                        152
rollout/
   ep len mean
                       | 1.42e+03
  ep_rew_mean
                       | 1.99e+03
time/
                       | 121
  fps
   iterations
                        778
                       3290
   time_elapsed
```

```
total_timesteps
                      | 398336
train/
  approx kl
                      0.0030297516
   clip_fraction
                      0.015
                      0.2
   clip range
                     | -1.03
   entropy_loss
   explained_variance | 0.913
  learning_rate
                      | 1e-06
                      | 132
   loss
                     | 7770
   n_updates
   policy_gradient_loss | -0.00262
              | 197
   value_loss
rollout/
  ep_len_mean
ep_rew_mean
                      | 1.42e+03
                    1.99e+03
time/
  fps
  iterations
                      | 779
                     3294
  time elapsed
  total_timesteps
                     | 398848
train/
                      | 0.0017426825
  approx_kl
   clip fraction
  clip_range
entropy_loss
                     | 0.2
                      | -1.16
   explained_variance | 0.952
   learning_rate
                      le-06
                      | 53.2
  loss
                      | 7780
   n_updates
   policy_gradient_loss | -0.00114
   value loss
                      | 136
rollout/
  ep len mean
                      | 1.42e+03
                      | 1.99e+03
  ep_rew_mean
time/
                      | 121
                     | 780
   iterations
  time_elapsed
                    | 3298
  total timesteps
                      399360
train/
                      0.00076782587
   approx kl
   clip_fraction
  clip_range
entropy_loss
                      0.2
                     .
| -0.827
   explained_variance | 0.929
   learning_rate | 1e-06
                      | 65.1
   n updates
                      | 7790
   policy_gradient_loss | 0.00033
   value loss
                      | 200
rollout/
                    | 1.42e+03
  ep_len_mean
   ep_rew_mean
                      | 1.99e+03
time/
                      | 121
  fps
   iterations
                      781
                    | 3303
| 399872
   time_elapsed
  total_timesteps
train/
                      | 0.0015302531
  approx_kl
   clip_fraction
   clip range
                      0.2
   entropy_loss
                      | -1.12
   explained_variance | 0.961
                      | 1e-06
   learning_rate
                      | 54.5
                      | 7800
   n_updates
   policy_gradient_loss | 0.00125
   value loss
                      | 117
rollout/
  ep_len_mean
                      | 1.42e+03
  ep_rew_mean
                      | 1.98e+03
time/
                      | 121
  fps
  iterations
                      | 782
```

```
time elapsed
                      | 3308
                        400384
  total_timesteps
train/
                      0.0005769945
  approx_kl
  clip_fraction
                      0.2
  clip_range
                      i -1.03
  entropy loss
  explained_variance
                     | 0.935
                      le-06
  learning_rate
                      | 94
  loss
                      | 7810
  n updates
  policy_gradient_loss | -0.000436
                      | 265
  value loss
rollout/
  ep len mean
                      1.98e+03
  ep rew mean
time/
                      | 121
  fps
  iterations
                     | 3312
  time_elapsed
  total_timesteps
                      | 400896
train/
  approx kl
                      0.002718035
                      0.00117
  clip_fraction
  clip range
                      0.2
  entropy_loss
                      | -1.04
  explained variance | 0.97
  learning_rate
                      | 1e-06
                      | 63.7
  n updates
                      i 7820
  policy gradient loss | -0.00128
  value_loss | 150
                      | 1.43e+03
  ep_len_mean
  ep_rew_mean
                      | 1.98e+03
time/
                      | 121
                      | 784
  iterations
                      | 3316
  time_elapsed
                      401408
  total_timesteps
                      0.0002441291
  approx kl
  clip_fraction
  clip range
                      0.2
  entropy_loss
                      | -1.12
  explained_variance | 0.888
  learning_rate
                      | 1e-06
                      | 57
  loss
  n updates
                      | 7830
  policy_gradient_loss | -9.61e-05
  value_loss
                      | 274
rollout/
                      | 1.43e+03
  ep_len_mean
  ep rew mean
                      | 1.98e+03
time/
                        121
  fps
                      785
  iterations
  time elapsed
  total_timesteps
                      | 401920
train/
                      0.0076090884
  approx_kl
  clip_fraction
                      0.0299
  clip_range
                      0.2
  entropy_loss
                      | -1.24
  explained_variance | 0.897
  learning_rate
                      | 1e-06
  loss
                        181
                        7840
  n updates
  policy gradient loss | 0.00542
  value loss
                      | 1.43e+03
  ep len mean
                      | 1.98e+03
  ep_rew_mean
time/
                      | 121
  fps
```

iterations	786
time_elapsed	3324
total_timesteps	402432
train/	
approx_kl	0.0023324257
clip_fraction	0.0164
clip_range	0.2
1 17	-1.05
explained_variance	0.951
learning_rate	1e-06
loss	52
n_updates	7850
policy_gradient_loss	
value_loss	149
rollout/	1
ep len mean	1.44e+03
ep rew mean	1.99e+03
time/	
fps	121
iterations	787
time elapsed	3328
total timesteps	402944
train/	i
approx_kl	0.0030244938
clip_fraction	0
clip_range	0.2
entropy_loss	-1.2
explained_variance	0.96
learning_rate	1e-06
loss	31.4
	7860
, , , , , , , , , , , , , , , , , , , ,	-0.000932
. –	100
rollout/	
ep_len_mean	1.44e+03
ep_rew_mean	1.99e+03
time/	1.550.05
fps	121
iterations	788
time elapsed	3332
total_timesteps	403456
train/	
approx kl	0.011750124
clip_fraction	0.0566
clip_range	0.2
entropy_loss	-1.08
<pre> explained_variance </pre>	0.792
learning_rate	1e-06
loss	99.5
n_updates	7870
<pre>policy_gradient_loss </pre>	0.00494
value_loss	745
rollout/	
ep_len_mean	1.44e+03
ep_rew_mean	1.99e+03
time/	
fps	121
iterations	789
time elapsed	3337
total_timesteps	403968
train/	j
approx_kl	0.002405618
clip_fraction	0.0131
clip_range	0.2
entropy_loss	-1.15
explained_variance	0.891
learning_rate	1e-06
loss	84.9
n updates	7880
policy_gradient_loss	0.0042
	200
policy_gradient_loss	
policy_gradient_loss value_loss	
policy_gradient_loss value_loss rollout/	
policy_gradient_loss value_loss	200 j
policy_gradient_loss value_loss rollout/ ep_len_mean	200

fps	121
iterations	790
time_elapsed	3341
<pre>total_timesteps</pre>	404480
train/	i İ
approx kl	0.003979678
clip fraction	0.0234
· · · · · · · · · · · · · · · · · · ·	'
clip_range	0.2
entropy_loss	-1.28
<pre> explained variance</pre>	0.617
learning rate	l 1e-06
l loss	357
	'
n_updates	7890
1 1 1 1 1	0.000925
value_loss	906
rollout/	I I
!	
ep_len_mean	1.44e+03
ep_rew_mean	1.99e+03
time/	l l
fps	121
iterations	791
	1
time_elapsed	3345
<pre> total_timesteps</pre>	404992
train/	
approx kl	0.0073884362
clip_fraction	0.0389
_ :	'
clip_range	0.2
entropy_loss	-1.12
<pre> explained variance</pre>	0.939
learning rate	i 1 1e-06 i
l loss	31
!	
n_updates	7900
<pre>policy_gradient_loss</pre>	-0.00344
value_loss	172
rollout/	
•	
ep_len_mean	1.44e+03
ep_rew_mean	1.99e+03
time/	l I
	121
fps	121
fps iterations	792
fps iterations time_elapsed	792 3349
fps iterations	792
fps iterations time_elapsed	792 3349
fps iterations time_elapsed total_timesteps train/	792 3349 405504
fps iterations time_elapsed total_timesteps train/ approx_kl	792 3349 405504 0.0015964342
fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction	792 3349 405504 0.0015964342
fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range	792 3349 405504 0.0015964342 0
fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction	792 3349 405504 0.0015964342
fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range	792 3349 405504 0.0015964342 0
fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance	792 3349 405504 0.0015964342 0 0.2 -1.02 0.945
fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate	792 3349 405504 0.0015964342 0 0.2 -1.02 0.945 1e-06
<pre>fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss</pre>	792
fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates	792 3349 405504 0.0015964342 0 0.2 -1.02 0.945 1e-06 56 7910
<pre>fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss</pre>	792
<pre>fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss</pre>	792 3349 405504 0.0015964342 0 0.2 -1.02 0.945 1e-06 56 7910
<pre>fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss</pre>	792
<pre>fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss</pre>	792
fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss	792 3349 405504 0.0015964342 0 0.2 -1.02 0.945 1e-06 56 7910 -0.000137
fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss	792 3349 405504 0.0015964342 0 0.2 -1.02 0.945 1e-06 56 7910 -0.000137 145
fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean	792 3349 405504 0.0015964342 0 0.2 -1.02 0.945 1e-06 56 7910 -0.000137 145
fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean	792 3349 405504 0.0015964342 0 0.2 -1.02 0.945 1e-06 56 7910 -0.000137 145
fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean	792 3349 405504 0.0015964342 0 0.2 -1.02 0.945 1e-06 56 7910 -0.000137 145
fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/	792 3349 405504 0.0015964342 0 0.2 -1.02 0.945 1e-06 56 7910 -0.000137 145
fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps	792
fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations	792
fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed	792
fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations	792
fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed	792
fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/	792
fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl	792
fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction	792
fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range	792
fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss	792
fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range	792
fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss	792
fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate	792
fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss	792
fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates	792
fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss	792
fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss	792
fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss	792
fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss	792
fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss	792
fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/	792
fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean	792
fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/	792

```
time/
                        121
   fps
   iterations
                        794
                        3358
   time elapsed
                       1 406528
   total_timesteps
                        0.00241126
   approx kl
   clip_fraction
   clip_range
                       0.2
   entropy_loss
                       | -1.21
   explained_variance
                      0.593
   learning_rate
                       | 1e-06
                       | 319
   loss
                       | 7930
   n_updates
   policy_gradient_loss | -0.00117
                       568
   value loss
rollout/
   ep_len_mean
                        1.45e+03
                      | 2.01e+03
   ep_rew_mean
time/
                        121
   fps
                       795
   iterations
   time elapsed
   total_timesteps
                       1 407040
train/
                       | 0.0007996877
  approx_kl
   clip fraction
                       0.2
   clip_range
   entropy_loss
                       | -1.17
   explained variance | 0.623
   learning_rate
                       | 1e-06
   loss
                       i 187
   n updates
                       | 7940
   policy_gradient_loss | 0.00227
   value loss
                       | 1.45e+03
   ep_len_mean
  ep_rew_mean
                      | 2.01e+03
time/
  fps
                       1 121
   iterations
                       | 796
                       | 3366
   time elapsed
   total_timesteps
                       | 407552
train/
                      0 009849893
   approx_kl
   clip_fraction
                      0.0225
   clip_range
                      0.2
                       | -1.12
   entropy_loss
   explained_variance | 0.348
                       l 1e-06
   learning_rate
                       | 42.5
   loss
                       7950
   n updates
   policy_gradient_loss | 0.00136
   value loss
                       | 114
rollout/
                      1.45e+03
   ep len mean
   ep rew mean
                       | 2.01e+03
time/
                       | 121
   fps
   iterations
                        797
                        3370
   time_elapsed
   {\tt total\_timesteps}
                       | 408064
train/
   approx kl
                       0.0053293593
                      0.0105
   clip_fraction
   clip range
                      0.2
   entropy_loss
                       | -0.841
   explained variance
                      0.532
                       l 1e-06
   learning_rate
   loss
                       | 69.6
                       | 7960
   n updates
   policy gradient loss | -0.00443
   value_loss
rollout/
                       | 1.44e+03
  ep_len_mean
```

```
ep rew mean
                       | 1.99e+03
 time/
                         121
    fps
                       | 798
    iterations
                       | 3374
    time elapsed
                       | 408576
    total_timesteps
                       0.0053218924
    approx_kl
    clip fraction
                      0.0309
    clip_range
entropy_loss
                      0.2
                       | -0.971
    explained_variance | 0.843
    learning_rate
                       | 1e-06
                       | 77.4
    loss
                       7970
    n updates
    policy_gradient_loss | 0.00096
    value loss
 rollout/
    ep len mean
                       | 1.43e+03
                       | 1.97e+03
    ep_rew_mean
 time/
                       | 121
   fps
                      | 799
    iterations
    time_elapsed
                     | 3379
    total timesteps
                       | 409088
 train/
                       0.0014078442
    approx kl
                      0.00313
    clip_fraction
    clip_range
entropy_loss
                       0.2
                      | -1.08
    explained variance | 0.847
    learning_rate | 1e-06
                       | 105
    loss
                       | 7980
    n updates
    policy_gradient_loss | -7.13e-06
               | 306
    value_loss
 rollout/
                     | 1.43e+03
    ep len mean
    ep rew mean
                       | 1.97e+03
 time/
                       | 121
   fps
                       800
    iterations
                     | 3383
| 409600
    time_elapsed
    total timesteps
 train/
    approx_kl
                       0.000978198
                       | 0.000977
    clip_fraction
                       0.2
    clip range
                       | -0.962
    entropy_loss
    explained variance | 0.642
                       | 1e-06
    learning_rate
                       | 7990
    n_updates
    policy_gradient_loss | 0.00173
    value_loss | 892
 rollout/
                       | 1.43e+03
    ep len mean
                      1.97e+03
    ep rew mean
 time/
   fps
                       | 121
                       | 801
    iterations
    time elapsed
                      | 410112
    total_timesteps
 train/
                       | 0.002818976
    approx_kl
    clip fraction
                      | 0.2
    clip_range
    entropy loss
                       | -0.968
    explained_variance | 0.932
    learning_rate
                       le-06
                       | 40
    loss
    n_updates
                       8000
    policy_gradient_loss | -0.00299
    value_loss | 118
| rollout/
```

```
ep len mean
                       | 1.43e+03
   ep_rew_mean
                       | 1.97e+03
time/
                       i 121
  fps
                       802
   iterations
                      | 3392
   time_elapsed
  total timesteps
                      1 410624
train/
  approx kl
                      0.0012314889
   clip_fraction
   clip_range
                      0.2
                       | -0.85
   entropy_loss
   explained variance | 0.895
                      | 1e-06
   learning_rate
                       80.2
   loss
   n_updates
                       1 8010
   policy gradient loss | 4.46e-05
   value_loss | 126
rollout/
                       | 1.44e+03
   ep_len_mean
  ep_rew_mean
                     | 1.98e+03
time/
                      | 121
                     | 803
  iterations
  time_elapsed | 3396
total_timesteps | 411136
   time_elapsed
train/
                      0.0028143874
  approx_kl
                     | 0.000977
   clip fraction
   clip_range
                      0.2
  entropy_loss
                      | -0.84
   explained_variance | 0.857
   learning_rate | 1e-06
                      91.5
   loss
   n updates
                      | 8020
   policy_gradient_loss | -0.00254
   value_loss | 187
rollout/
                    | 1.44e+03
| 1.98e+03
   ep len mean
  ep_rew_mean
time/
  fps
                       121
  iterations
                      | 804
  time elapsed
                      3400
  total_timesteps
                     | 411648
train/
                      | 0.0016973985
  approx_kl
   clip_fraction
                      0.00664
   clip_range
                      0.2
  entropy_loss | -0.86
explained_variance | 0.859
                      l 1e-06
   learning_rate
                       | 144
  loss
   n updates
                       8030
   policy_gradient_loss | 0.000274
   value loss
rollout/
  ep_len_mean
                      1.44e+03
                      | 1.98e+03
  ep_rew_mean
time/
                       | 121
  fps
  iterations
                     | 3405
   time_elapsed
   total_timesteps
                      | 412160
train/
  approx kl
                      0.0026162206
                     | 0.0127
   clip_fraction
   clip range
                      0.2
                      | -0.83
   entropy_loss
   explained variance | 0.842
                       | 1e-06
   learning_rate
   loss
                       | 54.8
   n_updates
                       8040
   policy_gradient_loss | 0.00024
                       | 146
   value_loss
```

```
rollout/
                        1.44e+03
   ep len mean
  ep rew mean
                      | 1.98e+03
time/
  fps
                      | 121
                       806
   iterations
   time elapsed
                       3409
   total_timesteps
                      | 412672
                      | 0.0020804615
  approx_kl
  clip_fraction
                      0.0104
   clip_range
                      0.2
  entropy loss
                      | -0.867
   explained variance | 0.949
   learning rate
                      le-06
  loss
                      | 44.6
                      | 8050
  n updates
   policy_gradient_loss | -0.00271
   value loss | 90.2
rollout/
  ep len mean
                      | 1.46e+03
                      | 2e+03
  ep_rew_mean
time/
                      | 121
  fps
                      | 807
   iterations
   time_elapsed
                      | 3413
  total_timesteps
                      | 413184
train/
                      0.0019430695
   approx_kl
   clip_fraction
                     0.0191
   clip_range
                      0.2
   entropy_loss
                      | -0.865
   explained variance | 0.81
                      i 1e-06
   learning_rate
   loss
                      | 105
                      8060
   n updates
   policy_gradient_loss | 0.00112
   value loss
rollout/
                      1.46e+03
  ep len mean
   ep rew mean
                      | 2e+03
time/
                      | 121
  fps
  iterations
                    | 3417
  time elapsed
  total_timesteps
                      | 413696
train/
  approx kl
                      0.0027788293
                      0.0115
   clip_fraction
  clip_range
                      0.2
   entropy_loss
                      | -0.907
   explained variance | 0.931
  learning_rate
                      | 1e-06
   loss
                      | 37.8
   n_updates
                      8070
   policy_gradient_loss | 0.000675
   value_loss
                      | 1.46e+03
   ep_len_mean
  ep_rew_mean
                      2e+03
time/
  fps
                       809
   iterations
   time elapsed
                      | 3421
  total_timesteps
                      | 414208
                      0.0013255384
  approx_kl
   clip fraction
   clip range
                      0.2
   entropy loss
                      -0.629
   explained_variance
                      0.813
   learning_rate
                       1e-06
                      31.1
   n updates
                      8080
   policy_gradient_loss | 0.000737
   value loss
                      | 71
```

```
rollout/
                        1.46e+03
  ep len mean
   ep rew mean
                      | 1.99e+03
time/
                      | 121
  fps
                      810
   iterations
                      3426
   time elapsed
  total_timesteps
                     414720
train/
  approx kl
                      0.0002537456
   clip_fraction
  clip range
                      0.2
   entropy_loss
                       -0.634
   explained variance
                     0.886
                      1 1e-06
  learning_rate
                      8090
   n_updates
   policy_gradient_loss | -0.000824
   value_loss
                     | 289
rollout/
                       1.46e+03
   ep_len_mean
  ep_rew_mean
                      | 1.99e+03
time/
                      | 121
                      | 811
  iterations
  time elapsed
                     | 3430
                     | 415232
  total_timesteps
                      0.0019830442
  approx kl
   clip_fraction
                      0.2
   clip_range
   entropy loss
                      | -1.07
   explained_variance | 0.621
   learning_rate
                      | 1e-06
                      98.8
  loss
   n_updates
                      | 8100
   policy_gradient_loss | 0.000423
   value_loss
rollout/
   ep len mean
                      | 1.46e+03
  ep_rew_mean
                     1.99e+03
time/
  fps
                      121
  iterations
                      | 812
                    | 3434
   time elapsed
   total_timesteps
                      | 415744
train/
                      | 0.0011861005
  approx_kl
                      0.015
   clip fraction
   clip_range
                      0.2
  entropy_loss
                      -0.901
   explained_variance | 0.827
   learning_rate
                      | 1e-06
   loss
                      | 81.5
   n updates
                      | 8110
   policy_gradient_loss | 0.0018
   value loss
                      | 271
rollout/
                     | 1.46e+03
  ep_len_mean
                      | 1.99e+03
  ep_rew_mean
time/
  fps
                       121
                      | 813
   iterations
   time_elapsed
                      | 3438
   total_timesteps
                      | 416256
train/
                      0.005179275
   approx kl
   clip_fraction
                      | 0.0371
   clip_range
                      0.2
                      | -0.951
   entropy_loss
   explained variance
                     0.726
   learning_rate
                      | 1e-06
   loss
                      | 98.1
   n_updates
                      | 8120
   policy_gradient_loss | -0.000514
```

| 288

value_loss

rollout/ ep_len_mean | 1.47e+03 2.01e+03 ep_rew_mean time/ fps | 121 | 814 iterations time elapsed total_timesteps | 416768 train/ 0.0012652013 approx_kl clip_fraction | 0 clip_range
entropy_loss 0.2 | -0.948 explained_variance | 0.724 learning_rate l 1e-06 | 107 loss n updates 8130 policy_gradient_loss | -0.00174 value_loss | 280 ep_len_mean ep_rew_mean | 1.47e+03 2.01e+03 time/ | 121 fps iterations 815 time_elapsed | 3447 | 417280 total timesteps train/ 0.001265224 approx kl clip_fraction | 0 | 0.2 clip_range entropy_loss

policy_gradient_loss | -5.08e-05 value_loss | 417

explained variance | 0.848 learning_rate | 1e-06

loss

n_updates

| -0.914

| 93

i 8140

rollout/ 1.47e+03 ep len mean ep_rew_mean | 2.01e+03 time/ | 121 fps | 816 iterations time_elapsed | 3451 total_timesteps | 417792 0.0047150548 0.0133 0.2 approx kl clip_fraction clip range entropy_loss | -0.784 explained_variance | 0.737 learning_rate | 1e-06 66.3 loss | 8150 n_updates policy_gradient_loss | -8.26e-05 value loss | 159

rollout/	1 1
ep_len_mean	1.48e+03
ep_rew_mean	2e+03
time/	
fps	121
iterations	817
time_elapsed	3455
<pre>total_timesteps</pre>	418304
train/	
approx_kl	0.0018292393
<pre> clip_fraction</pre>	0.00352
clip_range	0.2
entropy_loss	-0.758
<pre> explained_variance</pre>	0.748
<pre> learning_rate</pre>	1e-06
loss	115
n_updates	8160
<pre>policy_gradient_loss</pre>	0.00159

l value less	226
value_loss	336
rollout/	
ep_len_mean	1.48e+03
ep_rew_mean	2e+03
time/	
fps iterations	121 818
time_elapsed	3459
total timesteps	418816
train/	İ
approx_kl	0.0023634308
clip_fraction	0.00801
clip_range	0.2
<pre> entropy_loss explained variance</pre>	-0.907 0.828
learning rate	l 1e-06
loss	292
n_updates	8170
1 , ,_3	-0.00138
value_loss	454
rollout/	
ep len mean	l 1.48e+03
ep rew mean	2.01e+03
time/	i
fps	121
iterations	819
time_elapsed	3463
<pre> total_timesteps train/</pre>	419328
approx kl	
clip_fraction	0.0005252050
clip range	0.2
entropy_loss	-0.749
explained_variance	0.905
learning_rate	le-06
loss	48
n_updates	8180 -0.000866
<pre>policy_gradient_loss value loss</pre>	-0.000000 120
vacae_coss	
rollout/	
ep_len_mean	1.48e+03
ep_rew_mean	2.01e+03
time/	
fps iterations	121 820
time elapsed	3468
total timesteps	419840
train/	i
approx_kl	0.0009922427
clip_fraction	0
clip_range	0.2
<pre> entropy_loss explained variance</pre>	-0.637 0.89
learning rate	1e-06
l loss	89
n updates	8190
. = .	-0.00131
value_loss	359
L rollout/	
rollout/	 1.48e+03
<pre> ep_len_mean ep rew mean</pre>	1.48e+03 2.01e+03
time/	-1010103
fps	121
iterations	821
time_elapsed	3473
total_timesteps	420352
train/	1

28.2 8200

0.005250614 0.0127 0.2 -0.784 0.876 1e-06

| train/

loss

n_updates

anny
approx_kl
clip_fraction
clip_range
entropy_loss
explained_variance
learning_rate

<pre>policy_gradient_loss value loss</pre>	-0.00089 123
vacue_coss	
rollout/	
ep len mean	
ep_rew_mean	2e+03
time/ fps	
iterations	822
time_elapsed	3477
total_timesteps train/	420864
approx_kl	0.00031840673
clip_fraction	0
<pre> clip_range entropy loss </pre>	0.2 -0.664
explained_variance	0.855
learning_rate	1e-06
loss n updates	141 8210
- : - : : : : : : : : : : : : : : : : :	-0.00117
value_loss	240
rollout/	l l
ep_len_mean	1.48e+03
ep_rew_mean time/	2e+03
fps	121
iterations	823
<pre> time_elapsed total_timesteps </pre>	3481 421376
train/	421370
approx_kl	0.0018387336
<pre> clip_fraction clip range </pre>	0.00137 0.2
entropy_loss	-0.768
explained_variance	0.928
<pre> learning_rate loss </pre>	1e-06 104
n_updates	8220
policy_gradient_loss	9.48e-07
value_loss	205
rollout/ ep len mean	 1.48e+03
ep_rew_mean	2.01e+03
time/	
fps iterations	121 824
time_elapsed	3485
total_timesteps	421888
train/ approx kl	
clip_fraction	0.0291
clip_range	0.2
<pre> entropy_loss explained variance </pre>	-0.716 0.731
learning_rate	le-06
loss	128
<pre> n_updates policy_gradient_loss </pre>	8230 0.00217
value_loss	439
rollout/	I I
ep_len_mean	1.48e+03
ep_rew_mean time/	2.01e+03
fps	121
iterations	825
time_elapsed total timesteps	3489 422400
train/	
approx_kl	0.002545789
<pre> clip_fraction clip_range </pre>	0.00762 0.2
entropy_loss	-0.81
explained_variance	0.829
<pre> learning_rate loss </pre>	1e-06 177
, I	1

n updates	8240
policy_gradient_loss	-0.000763
value_loss	452
rollout/	1
ep_len_mean	1.48e+03
ep_rew_mean	2.01e+03
time/ fps	
iterations	121 826
time_elapsed	3493
total_timesteps	422912
train/	
approx_kl clip_fraction	0.0034168828 0.00781
clip range	0.2
' ''= '	-0.674
explained_variance	-0.211
<pre> learning_rate loss</pre>	1e-06 157
n updates	137 8250
	-0.00238
value_loss	422
rollout/	
ep_len_mean	1.48e+03
ep_rew_mean	2.01e+03
time/	
fps iterations	121 827
time elapsed	3498
total_timesteps	423424
train/	
approx_kl	0.00022924424 0.00352
<pre> clip_fraction clip_range</pre>	0.00332
entropy_loss	-0.998
<pre> explained_variance </pre>	0.616
learning_rate	1e-06
loss n updates	26.6 8260
policy_gradient_loss	-0.00125
value_loss	174
rollout/	
ep_len_mean	1.49e+03
ep_rew_mean	2.01e+03
time/	
fps iterations	121 828
time_elapsed	3502
total_timesteps	423936
train/	
approx_kl clip fraction	0.0028663962 0.000586
clip range	0.2
entropy_loss	-0.971
–	0.806
<pre> learning_rate loss</pre>	1e-06 60.2
n updates	8270
policy_gradient_loss	-0.000833
value_loss	119
rollout/	
ep len mean	1.49e+03
ep_rew_mean	2.01e+03
time/	
fps iterations	121 829
time elapsed	3506
total_timesteps	424448
train/	
approx_kl	0.00075025216
<pre> clip_fraction clip_range</pre>	0 0.2
entropy loss	-0.729
explained_variance	0.691
learning_rate	1e-06

<pre> n_updates policy_gradient_loss value_loss</pre>	235 8280 -0.00135 643
rollout/	
ep_len_mean	
ep_rew_mean	2.01e+03
time/	
fps	121
iterations	830
time_elapsed	3510
<pre> total_timesteps</pre>	424960
train/	
approx_kl	0.004692618
clip_fraction	0.0287
<pre> clip_range entropy loss</pre>	0.2 -0.596
explained variance	0.745
	1e-06
l loss	69.4
n updates	8290
policy_gradient_loss	0.000173
value_loss	200
rollout/	
ep_len_mean	1.49e+03
ep_rew_mean	2.01e+03
time/ fps	121
iterations	831
time elapsed	3514
total timesteps	425472
train/	i
approx_kl	0.00048789498
clip_fraction	0
clip_range	0.2
1 3 =	-0.732
explained_variance	0.268
learning_rate	le-06
loss	127
<pre> n_updates policy_gradient_loss</pre>	8300 0.00197
value loss	484
rollout/	
ep_len_mean	1.49e+03
ep_rew_mean	2.01e+03
time/	
l fnc	
fps iterations	
iterations	832
iterations time_elapsed	
iterations	832 3518
iterations time_elapsed total_timesteps	832 3518
iterations time_elapsed total_timesteps train/ approx_kl clip_fraction	832 3518 425984
iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range	832 3518 425984 0.0043067886 0.0262 0.2
iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss	832 3518 425984 0.0043067886 0.0262 0.2 -1.05
iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance	832 3518 425984 0.0043067886 0.0262 0.2 -1.05 0.933
iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance	832 3518 425984 0.0043067886 0.0262 0.2 -1.05 0.933 1e-06
iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate	832 3518 425984 0.0043067886 0.0262 0.2 -1.05 0.933 1e-06 15.2
iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates	832 3518 425984 0.0043067886 0.0262 0.2 -1.05 0.933 1e-06 15.2 8310
<pre>iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss</pre>	832 3518 425984 0.0043067886 0.0262 0.2 -1.05 0.933 1e-06 15.2 8310 -0.000912
iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates	832 3518 425984 0.0043067886 0.0262 0.2 -1.05 0.933 1e-06 15.2 8310
<pre>iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss</pre>	832 3518 425984 0.0043067886 0.0262 0.2 -1.05 0.933 1e-06 15.2 8310 -0.000912
<pre>iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss</pre>	832 3518 425984 0.0043067886 0.0262 0.2 -1.05 0.933 1e-06 15.2 8310 -0.000912
iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss	832 3518 425984 0.0043067886 0.0262 0.2 -1.05 0.933 1e-06 15.2 8310 -0.000912
<pre>iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss</pre> rollout/	832 3518 425984 0.0043067886 0.0262 0.2 -1.05 0.933 1e-06 15.2 8310 -0.000912 81.8
iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/	832 3518 425984 0.0043067886 0.0262 0.2 -1.05 0.933 1e-06 15.2 8310 -0.000912 81.8
iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps	832 3518 425984 0.0043067886 0.0262 0.2 -1.05 0.933 1e-06 15.2 8310 -0.000912 81.8
iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations	832 3518 425984 0.0043067886 0.0262 0.2 -1.05 0.933 1e-06 15.2 8310 -0.000912 81.8
iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed	832 3518 425984 0.0043067886 0.0262 0.2 -1.05 0.933 1e-06 15.2 8310 -0.000912 81.8
iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps	832 3518 425984 0.0043067886 0.0262 0.2 -1.05 0.933 1e-06 15.2 8310 -0.000912 81.8
<pre>iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/</pre>	832 3518 425984 0.0043067886 0.0262 0.2 -1.05 0.933 1e-06 15.2 8310 -0.000912 81.8 1.49e+03 2.01e+03 121 833 3523 426496
iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl	832 3518 425984 0.0043067886 0.0262 0.2 -1.05 0.933 1e-06 15.2 8310 -0.000912 81.8 -1.49e+03 2.01e+03 121 833 3523 426496 0.0061724475
iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction	832 3518 425984 0.0043067886 0.0262 0.2 -1.05 0.933 1e-06 15.2 8310 -0.000912 81.8 1.49e+03 2.01e+03 121 833 3523 426496 0.0061724475 0.0529 1.45984 1.45986 1.4598
iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range	832 3518 425984 0.0043067886 0.0262 0.2 -1.05 0.933 1e-06 15.2 8310 -0.000912 81.8 -1.49e+03 2.01e+03 121 833 3523 426496 0.0061724475
iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction	832 3518 425984 0.0043067886 0.0262 0.2 -1.05 0.933 1e-06 15.2 8310 -0.000912 81.8 1.49e+03 2.01e+03 121 833 3523 426496 0.0061724475 0.0529 0.2

learning_rate	1e-06
loss	5.5
	8320
<pre>policy_gradient_loss</pre>	-0.00242
value_loss	23.8
rollout/	1
ep_len_mean	1.51e+03
ep_rew_mean	2.02e+03
time/	i i
fps	i 121 i
iterations	834
time elapsed	3527
total timesteps	427008
train/	127000
approx kl	0.0037974776
clip_fraction	0.000586
	0.2
entropy loss	-1.09
_ ', - = ,	0.795
	! !
_	! = !
loss	92
n_updates	8330
<pre>policy_gradient_loss</pre>	
value_loss	269
rollout/	l Ī
ep_len_mean	1.51e+03
ep_rew_mean	2.02e+03
time/	į į
fps	121
iterations	835
time elapsed	3531
total_timesteps	427520
train/	i i
approx kl	0.0019622387
clip_fraction	0.00547
	0.2
_	-0.742
<u> </u>	0.742
learning rate	l 1e-06
	1 242
loss	242 8340
n_updates	
<pre>policy_gradient_loss</pre>	
value_loss	481
rollout/	1
ep len mean	i 1.51e+03
ep rew mean	i 2.02e+03 i
time/	
fps	121
iterations	l 836
time elapsed	3535
total timesteps	428032
train/	, .
approx kl	0.0010834633
<u> </u>	0.0131
clip_rraction	0.0131
entropy loss	0.2
_ ', - = ,	0.869
	: :
learning_rate	1e-06
loss	33.3
n	
n_updates	8350
 policy_gradient_loss	8350 -0.000721
 policy_gradient_loss value_loss	8350 -0.000721 86
 policy_gradient_loss value_loss	8350 -0.000721
policy_gradient_loss value_loss	8350 -0.000721 86
policy_gradient_loss value_loss rollout/	8350 -0.000721 86
policy_gradient_loss value_loss rollout/ ep_len_mean	8350
policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean	8350 -0.000721 86
policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/	8350
policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps	8350
policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations	8350
policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed	8350
policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations	8350
policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed	8350
policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps	8350
policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/	8350
policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction	8350

```
explained variance
                     0.874
  learning_rate
                      | 1e-06
                      50.8
  loss
                      8360
  n_updates
  policy_gradient_loss | -0.000146
                      | 148
  value loss
                        1.53e+03
  ep_len_mean
  ep_rew_mean
                      | 2.04e+03
time/
  fps
                      | 121
                      | 838
  iterations
  time elapsed
                     3543
                     429056
  total timesteps
                      0.0008829279
  approx_kl
  clip fraction
                      0.00137
  clip_range
                      0.2
                      | -0.74
  entropy_loss
  explained_variance | 0.802
                      | 1e-06
  learning_rate
                      | 114
  n updates
                      | 8370
  policy_gradient_loss | -0.00337
  value loss | 350
rollout/
  ep len mean
                      | 2.04e+03
  ep_rew_mean
                      | 121
  fps
                      | 839
  iterations
                      | 3548
  time_elapsed
  total_timesteps
                      | 429568
train/
  approx_kl
                      | 0.0033302738
  clip_fraction
                      | 0.0168
                     | 0.2
  clip_range
  entropy_loss
                      | -0.73
  explained_variance | 0.935
                      l 1e-06
  learning_rate
                      | 58.6
                      | 8380
  n updates
  policy_gradient_loss | -0.00161
  value loss | 108
                      | 1.53e+03
  ep_len_mean
  ep_rew_mean
                     | 2.06e+03
time/
                      | 121
  fps
  iterations
  time_elapsed
                    | 3553
  total_timesteps
                      | 430080
train/
                      0.002981563
  approx kl
  clip_fraction
                      | 0.0193
  clip_range
entropy_loss
                      0.2
                      | -0.793
  explained variance | 0.635
                      | 1e-06
  learning_rate
                      92.1
  loss
                      8390
  n_updates
  policy_gradient_loss | 0.00276
  value_loss
                      | 1.53e+03
  ep len mean
                      2.06e+03
  ep rew mean
time/
                      | 121
  fps
                      | 841
  iterations
  time elapsed
                      | 3557
  total_timesteps
                      | 430592
                      | 0.00070592354
  approx_kl
  clip fraction
                      | 0
  clip_range
                      0.2
```

entropy_loss	-0.773
	0.404
<pre> learning_rate loss</pre>	1e-06 198
	8400
. = .	-0.00312
value loss	788
rollout/	
ep_len_mean	1.53e+03
ep_rew_mean time/	2.05e+03
fps	
iterations	842
time elapsed	3561
total_timesteps	431104
train/	
approx_kl	0.001069485
clip_fraction	0.000586
<pre> clip_range entropy loss</pre>	0.2 -0.708
enclopy_toss explained variance	-0.708 0.872
learning rate	l 1e-06
loss	26.7
n_updates	8410
<pre>policy_gradient_loss </pre>	7.79e-05
value_loss	70.1
rollout/	
ep_len_mean	
ep rew mean	2.05e+03
time/	
fps	121
iterations	843
time_elapsed	3565
total_timesteps	431616
train/ approx kl	
clip_fraction	0.0014300724
clip_range	0.2
entropy_loss	-0.671
explained variance	0.68
learning_rate	le-06
loss	43.7
. – .	8420
<pre>policy_gradient_loss value_loss</pre>	0.00102 542
	342
rollout/	
ep_len_mean	1.52e+03
ep_rew_mean	2.04e+03
time/	
fps iterations	121 844
time elapsed	3570
total_timesteps	432128
train/	
approx_kl	0.006865144
clip_fraction	0.0287
clip_range	0.2
entropy_loss	-0.814
explained_variance	0.87
<pre> learning_rate loss</pre>	1e-06 37.7
•	37.7 8430
. – .	0.000327
	91.9
L mallout/	
rollout/	 1.52e+03
ep_len_mean ep rew mean	1.52e+03
ep_rew_mean time/	2.070707
fps	121
iterations	845
time_elapsed	3574
total_timesteps	432640
train/	
approx_kl	0.0019011095 0.00645
clip_fraction	0.00045

clip_range	0.2
entropy loss	-0.804
explained variance	0.305
learning rate	1e-06
loss	250
n updates	8440 j
policy_gradient_loss	-0.00199
	721
rollout/	
ep_len_mean	1.52e+03
ep_rew_mean	2.04e+03
time/	
fps	121
iterations	846
time_elapsed	3578 433152
<pre> total_timesteps train/</pre>	455152
approx kl	0.0056587346 l
clip fraction	0.0187
clip_range	0.2
entropy_loss	-0.871
	0.797
learning rate	1e-06
loss	53.9
n updates	8450
policy_gradient_loss	-0.00592
value_loss	133
rollout/	
ep_len_mean	1.53e+03
ep_rew_mean	2.04e+03
time/	
fps	121
iterations	847
time_elapsed	3582
total_timesteps	433664
train/	0.00877547
approx_kl clip_fraction	0.0309
clip_rraction	0.2
entropy_loss	-0.832
explained variance	0.91
learning rate	1e-06
l loss	22.2
n updates	8460 i
policy_gradient_loss	-0.00129
	79.3 j
rollout/	
ep_len_mean	1.53e+03
ep_rew_mean	2.04e+03
time/	101
fps	121
iterations	848
time_elapsed	3586
<pre> total_timesteps train/</pre>	434176
approx kl	0.001084125
clip_fraction	0.001004125
clip_range	0.2
entropy_loss	-0.753
	0.774
learning_rate	1e-06
loss	150
n_updates	8470
policy_gradient_loss	-0.00179
value_loss	362
1 11 1	
rollout/	1 52-102
ep_len_mean	1.53e+03
ep_rew_mean	2.04e+03
time/	121
fps iterations	121
	849
	3501
time_elapsed total timestens	3591 434688
total_timesteps	3591 434688
	1

```
clip_fraction
                      0.2
   clip_range
                      | -0.692
   entropy_loss
   explained_variance | 0.808
   learning_rate
                      | 1e-06
                      | 40.7
                      8480
   n updates
   policy_gradient_loss | -0.00101
   value loss | 89.6
rollout/
  ep len mean
                       1.52e+03
                      | 2.03e+03
  ep_rew_mean
time/
                      1 121
  fps
  iterations
                      | 850
                    | 3595
  time elapsed
  total timesteps
                      435200
train/
                      | 0.0038750581
  approx kl
   clip_fraction
                      0.0205
  clip_range
entropy_loss
                      0.2
                     | -0.624
   explained variance | 0.877
                    | 1e-06
   learning_rate
                      | 52.7
                      | 8490
  n_updates
   policy_gradient_loss | -0.00479
   value_loss | 177
  ep_len_mean
                      | 1.52e+03
  ep_rew_mean
                      | 2.03e+03
time/
  fps
                      | 121
                      | 851
  iterations
                    3599
   time_elapsed
  total_timesteps
                     | 435712
                      | 0.00090156554
  approx_kl
   clip fraction
                      | 0.00352
                     0.2
   clip_range
   entropy loss
                     | -0.602
   explained variance | 0.819
   learning_rate
                      | 1e-06
   loss
                      26.8
   n_updates
                     | 8500
   policy_gradient_loss | 0.00185
              | 240
   value_loss
rollout/
                      | 1.52e+03
  ep_len_mean
  ep rew mean
                      | 2.03e+03
time/
  fps
                      | 121
   iterations
                      | 852
   time elapsed
                      | 3603
  total_timesteps
                      | 436224
train/
                      0.004941793
   approx_kl
   clip fraction
                     0.0168
   clip_range
                     0.2
   entropy_loss
                      | -0.612
   explained_variance | 0.919
   learning_rate
                      | 1e-06
   loss
                      30.4
   n updates
   policy_gradient_loss | -0.00226
rollout/
  ep len mean
                      1.51e+03
                      | 2.02e+03
  ep_rew_mean
time/
                      | 121
  fps
   iterations
                      | 853
                      | 3607
   time_elapsed
   total_timesteps
                      | 436736
train/
```

```
approx_kl
                      | 0.0009731443 |
   clip_fraction
                     0.00547
  clip_range
entropy_loss
                    0.2
                     | -0.534
   explained variance | 0.877
   learning_rate
                    | 1e-06
   loss
                      94.8
             | 8520
   n updates
   policy_gradient_loss | -0.002
   value_loss | 163
rollout/
                    | 1.51e+03
  ep_len_mean
ep_rew_mean
                    2.02e+03
time/
                      121
                    | 854
  iterations
                    3612
  time_elapsed
  total_timesteps
                     | 437248
train/
                     0.0011014047
  approx_kl
                    | 0.00898
   clip_fraction
  clip_range
entropy_loss
                     0.2
                     | -0.602
   explained_variance | 0.709
   learning_rate | 1e-06
   loss
                     | 101
   n updates
                     | 8530
   policy_gradient_loss | -0.00041
rollout/
                     | 1.52e+03
  ep len mean
  ep_rew_mean
                     | 2.02e+03
time/
                     | 121
  fps
                   | 855
| 3616
| 437760
   iterations
  time_elapsed
  total_timesteps
train/
  approx kl
                     0.0017494708
  clip_fraction
                     0.0043
  clip_range
                    | 0.2
  entropy_loss | -0.626
explained_variance | 0.653
   learning_rate
                     | 1e-06
  loss
                     | 123
  n updates
                     | 8540
   policy_gradient_loss | 0.00123
   value_loss | 248
rollout/
  ep_len_mean
                     | 1.52e+03
                    2.02e+03
  ep_rew_mean
time/
                      | 121
  fps
                     | 856
  iterations
                  | 3620
| 438272
  time_elapsed
  total timesteps
train/
  approx kl
                      0.0030495427
                     | 0.0121
  clip_fraction
                     | 0.2
  clip_range
   entropy_loss
                      | -0.842
   explained variance | 0.843
                     | 1e-06
  learning_rate
                      | 177
                     | 8550
   n_updates
  policy_gradient_loss | -0.00461
   value_loss | 390
rollout/
                    1.51e+03
  ep_len_mean
  ep_rew_mean
time/
                      | 121
                     | 857
  iterations
   time elapsed
                      | 3624
                      | 438784
   total_timesteps
```

```
train/
                       0.0012006845
   approx kl
   clip fraction
                       0.0043
                       0.2
   clip_range
                       1 -0.633
   entropy_loss
   explained_variance | 0.866
                       l 1e-06
   learning_rate
                       | 61
                       8560
   n updates
   policy_gradient_loss | -0.0012
   value_loss | 150
rollout/
                        1.51e+03
   ep len mean
                       | 2.01e+03
   ep rew mean
time/
                        121
  fps
   iterations
                        858
                       | 3628
   time_elapsed
   total\_timesteps
                       | 439296
train/
                        0.0009969636
   approx kl
   clip_fraction
   clip range
                       0.2
                       | -0.957
   entropy_loss
   explained variance | 0.84
   learning_rate
                       | 1e-06
   loss
                       | 8570
   n_updates
   policy_gradient_loss | -0.00125
   value_loss
                       | 388
rollout/
                        1.51e+03
   ep_len_mean
   ep_rew_mean
                      | 2.01e+03
time/
  fps
                       | 121
   iterations
                       | 859
                      | 3633
   time_elapsed
   total_timesteps
                       | 439808
train/
                       0.0005684281
  approx kl
   clip fraction
                       | 0.000391
                       0.2
   clip_range
   entropy_loss
                       -0.775
   explained variance | 0.664
   learning_rate
                       | 1e-06
                       | 53.6
   loss
   n_updates
                       | 8580
   policy_gradient_loss | 0.00111
   value loss
                       | 174
   ep_len_mean
                      | 1.52e+03
  ep_rew_mean
                       | 2.02e+03
time/
  fps
                       | 121
   iterations
                        860
   time elapsed
                        3638
   total timesteps
                       | 440320
train/
                       | 0.0029349043
   approx_kl
   clip_fraction
                       0.0148
   clip_range
                       0.2
   entropy_loss
                       | -0.624
   explained_variance | 0.841
                       | 1e-06
   learning_rate
                       62.7
   loss
   n updates
                       | 8590
   policy_gradient_loss | 0.000828
   value loss
                       | 160
rollout/
   ep len mean
                       | 1.52e+03
                       | 2.02e+03
   ep_rew_mean
time/
                       | 121
  fps
   iterations
                        861
                       3642
   time_elapsed
```

```
total_timesteps
                      | 440832
train/
  approx kl
                      0.0007260926
   clip_fraction
                      | 0
                      0.2
   clip range
                      | -0.847
   entropy_loss
   explained variance | 0.522
                      | 1e-06
   learning_rate
   loss
                      | 8600
   n_updates
   policy_gradient_loss | -0.00246
   value_loss
              | 791
rollout/
  ep_len_mean
ep_rew_mean
                      | 1.51e+03
                    2.01e+03
time/
  fps
  iterations
                      | 862
                    .
| 3646
   time elapsed
                     | 441344
  total_timesteps
train/
                      0.0028244024
  approx_kl
   clip fraction
                    | 0.0133
  clip_range
entropy_loss
                    | 0.2
                     | -0.842
   explained_variance | 0.847
   learning_rate
                     le-06
                      | 35.4
  loss
                      | 8610
   n_updates
   policy_gradient_loss | -0.00123
   value loss
rollout/
  ep len mean
                      | 1.51e+03
  ep_rew_mean
                      | 2.01e+03
time/
                      | 121
                    | 863
   iterations
  time_elapsed
                    | 3650
  total timesteps
                      | 441856
train/
                      0.006179764
  approx kl
   clip fraction
                     0.0307
                      0.2
   clip_range
  entropy_loss
                     -0.982
   explained_variance | 0.865
   learning_rate | 1e-06
   loss
                      | 163
   n updates
                      8620
   policy_gradient_loss | -0.00673
   value loss
                      | 286
rollout/
                    | 1.51e+03
  ep len mean
   ep_rew_mean
                      | 2e+03
time/
                      | 121
  fps
   iterations
                    | 3654
| 442368
  time_elapsed
  total timesteps
train/
                      | 0.0047825174
  approx_kl
   clip_fraction
                      | 0.0314
   clip range
                      0.2
                     | -0.848
   entropy_loss
   explained_variance | 0.928
                      | 1e-06
   learning_rate
                      | 33.8
                      | 8630
   n_updates
   policy_gradient_loss | -0.00347
   value_loss
                      94.5
  ep_len_mean
                      | 1.51e+03
  ep_rew_mean
time/
                      | 121
  fps
  iterations
                      | 865
```

```
time elapsed
                       | 3658
                        442880
   total_timesteps
train/
                       0.0025293496
   approx_kl
                      0.00215
   clip fraction
   clip_range
                      0.2
                      i -0.926
   entropy loss
   explained_variance
                     0.808
                       le-06
   learning_rate
                       | 225
   loss
                      | 8640
   n updates
   policy_gradient_loss | -0.00177
                      | 432
   value loss
rollout/
                        1.51e+03
   ep len mean
   ep rew mean
                      | 2e+03
time/
                       | 121
  fps
  iterations
                     | 3662
  time_elapsed
  total_timesteps
                     | 443392
train/
  approx kl
                      0.0024931547
                      | 0.0238
   clip_fraction
   clip range
                      0.2
   entropy_loss
                      | -0.852
   explained variance | 0.681
                      | 1e-06
  learning_rate
                       | 117
   n_updates
                       8650
   policy gradient loss | -0.00389
   value_loss | 307
                      | 1.51e+03
  ep_len_mean
  ep_rew_mean
                      | 2e+03
time/
                      | 121
                      | 867
  iterations
                      | 3667
   time_elapsed
  total_timesteps
                      | 443904
                      0.0019147762
  approx kl
   clip_fraction
                      0.0084
   clip range
                      0.2
   entropy_loss
                      | -0.895
   explained_variance | 0.685
   learning_rate
                      | 1e-06
                       | 134
   loss
   n updates
                      | 8660
   policy_gradient_loss | -0.00135
   value_loss
                      | 238
rollout/
                      | 1.52e+03
   ep_len_mean
  ep rew mean
                      | 2.01e+03
time/
                       121
  fps
  iterations
                      | 868
   time elapsed
  total_timesteps
                      | 444416
train/
                      | 0.0027880862
  approx_kl
   clip_fraction
                      0.0164
   clip_range
                      0.2
   entropy_loss
                      | -0.936
   explained_variance | 0.878
   learning_rate
                       | 1e-06
  loss
                       | 36.8
   n updates
   policy gradient loss | 0.00105
   value loss
                       | 1.52e+03
  ep len mean
                       | 2.01e+03
  ep_rew_mean
time/
                       | 121
  fps
```

```
iterations
                       | 869
   time_elapsed
                       | 3675
   total timesteps
                       | 444928
train/
                       0.007921228
   approx kl
   clip_fraction
                       0.0389
   clip_range
entropy_loss
                       0.2
                       | -0.982
   explained variance
                     0.579
                       | 1e-06
   learning_rate
                         215
   loss
   n_updates
                       | 8680
   policy_gradient_loss | -0.00716
                       | 691
   value_loss
   ep len mean
                        1.52e+03
   ep rew mean
                       2.01e+03
time/
  fps
   iterations
                        870
   time elapsed
                        3679
   total_timesteps
                       | 445440
                       | 0.0014228057
   approx_kl
   clip fraction
                       0.00254
                       0.2
   clip_range
   entropy loss
                       | -1.09
   explained_variance | 0.688
   learning_rate
                       | 1e-06
   loss
                       1 82.4
   n_updates
                       | 8690
   policy_gradient_loss | -0.000843
   value loss
rollout/
   ep_len_mean
                       | 1.53e+03
   ep_rew_mean
                       | 2.03e+03
time/
   fps
                       | 121
                       | 871
   iterations
                       | 3683
   time elapsed
   total_timesteps
                       | 445952
train/
                       0.01037769
   approx_kl
   clip fraction
                       0.05
   clip_range
                       0.2
   entropy_loss
                       | -0.927
   explained_variance | 0.671
   learning_rate
                       | 1e-06
   loss
                       | 28
                       8700
   n updates
   policy_gradient_loss | 0.00379
   value loss
rollout/
                       | 1.53e+03
   ep len mean
   ep_rew_mean
                       | 2.03e+03
time/
                       121
   fps
   iterations
                      872
                      | 3687
   time_elapsed
   total_timesteps
                       446464
train/
   approx kl
                       0.0013810283
   clip_fraction
                       0.00547
   clip range
                       0.2
   entropy_loss
                       | -1.1
   explained variance
                     | 0.754
                       | 1e-06
   learning_rate
                        122
   n_updates
                       8710
   policy_gradient_loss | -0.000446
   value loss
                       | 356
                       | 1.53e+03
   ep_len_mean
   ep_rew_mean
                       | 2.03e+03
time/
```

fps	121
iterations	873
time elapsed	3692
total timesteps	446976
	440370
train/	! !
approx_kl	0.008395778
clip_fraction	0.0443
clip range	0.2
entropy loss	-1.03
explained variance	0.891
•	: :
!	
loss	47.2
n_updates	8720
<pre>policy_gradient_loss</pre>	-0.00273
value_loss	i 90.2 i
· · · · · · · = · · · ·	
L ==11=::+/	
rollout/	! !
ep_len_mean	1.53e+03
ep_rew_mean	2.03e+03
time/	I I
fps	121
iterations	874
	! " !
time_elapsed	3696
total_timesteps	447488
train/	
approx kl	0.0050120205
clip_fraction	0.0229
	0.0229
clip_range	
entropy_loss	-1.01
<pre> explained_variance</pre>	0.665
learning_rate	1e-06
loss	284
n updates	8730
	-0.00445
value_loss	735
rollout/	I I
ep len mean	1.53e+03
	1 1
ep_rew_mean	2.03e+03
time/	l l
fps	121
iterations	875
time_elapsed	3700
	448000
	440000
<pre> total_timesteps</pre>	1 1
<pre> total_timesteps train/</pre>	
total_timesteps train/ approx_kl	 0.0018542497
<pre> total_timesteps train/</pre>	 0.0018542497 0.000977
total_timesteps train/ approx_kl	! !
<pre> total_timesteps train/ approx_kl clip_fraction clip_range</pre>	0.000977
<pre> total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss</pre>	0.000977 0.2 -1.05
<pre> total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance</pre>	0.000977 0.2 -1.05
<pre> total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate</pre>	0.000977
<pre> total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss</pre>	0.000977
<pre> total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates</pre>	0.000977
<pre> total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates</pre>	0.000977
<pre> total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss</pre>	0.000977
<pre> total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss</pre>	0.000977
<pre> total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss</pre>	0.000977
<pre>total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss</pre>	0.000977
<pre> total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss</pre> rollout/	0.000977
<pre> total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss</pre> rollout/ ep_len_mean	0.000977
<pre> total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss</pre> rollout/	0.000977
<pre> total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss</pre> rollout/ ep_len_mean	0.000977
<pre> total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss</pre> rollout/ ep_len_mean ep_rew_mean time/	0.000977
total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps	0.000977
total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations	0.000977 0.2 -1.05 0.846 1e-06 39.8 8740 -0.00169 145 1.53e+03 2.03e+03 121 876
total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed	0.000977
total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps	0.000977 0.2 -1.05 0.846 1e-06 39.8 8740 -0.00169 145 1.53e+03 2.03e+03 121 876
total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed	0.000977
total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl	0.000977
total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl	0.000977
total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss	0.000977
total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range	0.000977
total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss	0.000977
total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance	0.000977
total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss	0.000977
total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance	0.000977
total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss	0.000977
total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates	0.000977
total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss	0.000977
total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates	0.000977
total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss	0.000977
total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss	0.000977
total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss	0.000977
total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss value_loss	0.000977
total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean	0.000977
total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean	0.000977

```
time/
                        121
   fps
   iterations
                        877
                       3708
   time_elapsed
                       1 449024
   total_timesteps
train/
                        0.0048550954
   approx kl
   clip_fraction
                      | 0.000391
   clip_range
                      0.2
   entropy_loss
                      | -1.14
   explained_variance | 0.734
                      | 1e-06
   learning_rate
                      | 47.4
   loss
                      | 8760
   n_updates
   policy_gradient_loss | -0.00331
   value_loss
                      | 160
rollout/
   ep_len_mean
                        1.53e+03
                      | 2.02e+03
  ep_rew_mean
time/
                      | 121
  fps
  iterations
                      | 878
   time elapsed
                     | 3712
  total_timesteps
                      1 449536
train/
                      | 0.0047812345
  approx_kl
   clip fraction
                      0.0156
  clip_range
entropy_loss
                      0.2
                      | -1.11
   explained_variance | 0.912
   learning_rate
                      | 1e-06
   loss
                       l 122
   n updates
                       | 8770
   policy_gradient_loss | -0.00533
   value loss
  ep_len_mean
                      | 1.53e+03
  ep_rew_mean
                      | 2.03e+03
time/
  fps
                       i 121
                      | 879
  iterations
                      | 3718
   time elapsed
   total_timesteps
                      | 450048
train/
                      0.0036949771
  approx_kl
                     | 0.0131
   clip_fraction
   clip_range
                      0.2
                      | -1.02
   entropy_loss
   explained_variance | 0.908
                     | 1e-06
   learning_rate
                      | 32.9
  loss
                      8780
   n updates
   policy_gradient_loss | -0.00599
   value_loss | 88.5
rollout/
                      1.53e+03
  ep len mean
   ep rew mean
                      | 2.03e+03
time/
                      | 121
  fps
   iterations
                      | 880
   time_elapsed
                      | 3722
  total_timesteps
                       | 450560
train/
   approx kl
                      0.0023398183
                      0.0174
   clip_fraction
   clip range
                      0.2
   entropy_loss
                      | -0.997
   explained variance | 0.743
                       l 1e-06
   learning_rate
   loss
                      | 106
                      | 8790
   n updates
   policy gradient loss | -0.00071
   value_loss
rollout/
                      | 1.53e+03
  ep_len_mean
```

```
ep rew mean
                       | 2.03e+03
 time/
                        121
    fps
                       | 881
    iterations
                       | 3726
    time elapsed
    total_timesteps
                       451072
                       0.0020749639
    approx_kl
    clip fraction
                      0.0109
    clip_range
entropy_loss
                      | 0.2
                       | -0.99
    explained_variance | 0.939
    learning_rate
                      | 1e-06
                       | 39.7
    loss
                       8800
    n updates
    policy gradient loss | -0.000483
    value loss
 rollout/
    ep len mean
                       | 1.53e+03
                       | 2.02e+03
    ep_rew_mean
 time/
                       | 121
   fps
                      | 882
    iterations
                   3730
    time_elapsed
    total timesteps
                       | 451584
 train/
    approx kl
                       0.0023193015
                      | 0
    clip_fraction
                      0.2
    clip_range
entropy_loss
    explained variance | 0.645
    learning_rate
                     | 1e-06
    loss
                       | 247
                       8810
    n_updates
    policy_gradient_loss | -0.00246
               800
    value_loss
 rollout/
                     | 1.53e+03
    ep len mean
    ep rew mean
                       | 2.02e+03
 time/
                       | 121
   fps
                      883
    iterations
                     | 3734
| 452096
    time_elapsed
    total timesteps
 train/
                       0.00070983055
    approx_kl
    clip_fraction
                      0.2
    clip range
                      | -0.926
    entropy_loss
    explained variance | 0.719
                       l 1e-06
    learning_rate
                      | 8820
    n_updates
    policy_gradient_loss | -0.000556
    value_loss | 282
 rollout/
                     1.53e+03
2.02e+03
    ep len mean
    ep rew mean
 time/
   fps
                       | 121
                       | 884
    iterations
    time elapsed
                      | 3738
                      | 452608
   total_timesteps
 train/
                       0.0034679468
    approx_kl
    clip fraction
                      0.00625
                      | 0.2
    clip_range
    entropy loss
                       -1.15
    explained_variance | 0.877
    learning_rate
                       le-06
                       | 71.3
    loss
                       | 8830
    n_updates
    policy_gradient_loss | -0.000699
    value loss | 266
| rollout/
```

```
ep len mean
                      | 1.54e+03
   ep_rew_mean
                      | 2.03e+03
time/
                      i 121
  fps
                      885
   iterations
                      | 3743
   time_elapsed
  total timesteps
                      i 453120
train/
  approx kl
                      0.009808967
   clip_fraction
                      0.0342
   clip_range
                      0.2
   entropy_loss
                      | -1.14
   explained variance | 0.636
                      | 1e-06
   learning_rate
                      60.3
   loss
                      1 8840
   n_updates
   policy gradient loss | -0.0147
   value_loss | 225
rollout/
                       1.54e+03
   ep_len_mean
  ep_rew_mean
                     | 2.03e+03
time/
                      | 121
                     | 886
  iterations
                    3747
   time_elapsed
   total_timesteps
                      | 453632
train/
                      0.0037104106
  approx_kl
   clip fraction
                     0.00957
  clip_range
                      0.2
   entropy loss
                      | -1.17
   explained_variance | 0.801
   learning_rate | 1e-06
                      | 243
   loss
   n updates
                      | 8850
   policy_gradient_loss | -0.00406
   value_loss | 540
rollout/
   ep len mean
                      | 1.54e+03
  ep_rew_mean
                      2.04e+03
time/
  fps
                      121
                      | 887
  iterations
   time elapsed
                      | 3751
  total_timesteps
                     | 454144
train/
                      | 0.0036518984
  approx_kl
                      0.00898
   clip_fraction
   clip_range
                      0.2
                      | -1.08
   entropy_loss
   explained_variance | 0.676
                      l 1e-06
   learning_rate
                      | 122
  loss
   n updates
                      | 8860
   policy_gradient_loss | -0.00307
                      | 333
   value loss
rollout/
  ep len mean
                      | 1.54e+03
                      | 2.04e+03
  ep_rew_mean
time/
                      | 121
  fps
  iterations
                     | 3755
   time_elapsed
   total_timesteps
                      | 454656
train/
   approx kl
                      0.002067858
                     | 0.00762
   clip_fraction
   clip range
                      0.2
   entropy_loss
                      | -1.24
   explained variance | 0.574
                      | 1e-06
   learning_rate
   loss
                      | 341
   n_updates
                      8870
   policy_gradient_loss | -0.00182
                      | 820
   value_loss
```

```
rollout/
                       1.54e+03
  ep len mean
  ep_rew_mean
                      2.04e+03
time/
  fps
                      | 121
                       889
  iterations
  time elapsed
                       3759
                      | 455168
  total_timesteps
                      | 0.0032853598
  approx_kl
  clip fraction
                      | 0.0211
                      0.2
  clip_range
  entropy loss
                      | -1.15
  explained variance | 0.621
  learning_rate | 1e-06
                      i 78.7
  loss
                      | 8880
  n updates
  policy gradient loss | 0.00158
  value_loss | 171
rollout/
  ep_len_mean
ep_rew_mean
                      | 1.54e+03
                      | 2.03e+03
time/
                      | 121
  fps
  iterations
                     | 890
  time_elapsed
                      | 3764
  total_timesteps
                      | 455680
train/
                      0.0011580323
  approx_kl
  clip_fraction
                     | 0.2
  clip range
                      | -1.12
  entropy_loss
  explained variance | 0.918
                      l 1e-06
  learning_rate
  loss
                      | 31.6
                      | 8890
  n updates
  policy_gradient_loss | -3.47e-05
                      | 111
  value_loss
rollout/
                      | 1.54e+03
  ep len mean
  ep rew mean
                      | 2.03e+03
time/
                      | 121
  fps
  iterations
  time_elapsed
                    | 3768
  total timesteps
                      | 456192
train/
                      | 0.0013179611
  approx kl
                      | 0.00117
  clip_fraction
  clip_range
entropy_loss
                      0.2
                      | -1.16
  explained variance | 0.634
                      | 1e-06
  learning_rate
  loss
                      | 148
                      | 8900
  n_updates
  policy_gradient_loss | 0.000371
  value_loss
                     | 1.54e+03
  ep len mean
  ep_rew_mean
                      2.03e+03
time/
  fps
                      | 892
  iterations
  time elapsed
                     | 3772
                     456704
  total_timesteps
                      0.002084483
  approx_kl
  clip fraction
                     0.000781
  clip_range
                      0.2
  entropy loss
                      | -1.05
  explained_variance | 0.753
  learning_rate
                      | 1e-06
                      i 359
  n_updates
                      | 8910
  policy_gradient_loss | -0.0022
  value loss | 686
```

```
rollout/
                       1.54e+03
  ep len mean
   ep_rew_mean
                      | 2.03e+03
time/
                      | 121
  fps
                      893
   iterations
                      | 3776
   time elapsed
  total_timesteps
                    | 457216
train/
  approx kl
                      | 0.0060521974
   clip_fraction
                      | 0.0311
  clip range
                      0.2
   entropy_loss
                      | -1.09
   explained variance | 0.815
                      1 1e-06
  learning_rate
                      | 21.9
                      | 8920
   n_updates
   policy_gradient_loss | -7.75e-05
   value_loss | 146
rollout/
   ep_len_mean
                       1.54e+03
  ep_rew_mean
                     | 2.03e+03
time/
                      | 121
                     | 894
  iterations
  time elapsed
                     | 3780
  total_timesteps
                    | 457728
                      0.008407848
  approx_kl
                     0.0375
   clip_fraction
   clip_range
                     0.2
   entropy loss
                      | -0.867
   explained_variance | 0.726
   learning_rate
                     | 1e-06
                      | 26.1
  loss
   n_updates
                      8930
   policy_gradient_loss | -0.00412
   value_loss | 115
rollout/
                     | 1.55e+03
   ep len mean
  ep_rew_mean
                     2.04e+03
time/
  fps
                      121
                     | 895
  iterations
                    | 3784
   time elapsed
   total_timesteps
                      | 458240
train/
                      0.004203975
  approx_kl
                     | 0.000195
   clip fraction
   clip_range
                      0.2
  entropy_loss
                     -1.18
   explained_variance | 0.269
   learning_rate
                     | 1e-06
                      99.3
   loss
   n updates
                      8940
   policy_gradient_loss | -0.00256
   value loss
                      | 329
                    | 1.55e+03
  ep_len_mean
                      | 2.03e+03
  ep_rew_mean
time/
  fps
                      | 121
   iterations
   time_elapsed
                      | 3789
   total_timesteps
                      | 458752
train/
   approx kl
                      0.0066883364
   clip_fraction
                      0.0244
```

clip_range

entropy_loss
explained variance

loss

n_updates

value_loss

learning_rate

0.2

| 0.563

| 1e-06

8950

policy_gradient_loss | -0.000263

rollout/ ep_len_mean 1.55e+03 ep_rew_mean | 2.03e+03 time/ fps | 121 | 897 iterations time elapsed 3793 total_timesteps | 459264 train/ | 0.0047361325 approx_kl 0.00254 clip fraction clip_range
entropy_loss 0.2 entropy_loss | -1.14 explained_variance | 0.338 l 1e-06 learning_rate | 353 loss n updates | 8960 policy_gradient_loss | -0.00486 value_loss | 728 ep_len_mean ep_rew_mean | 1.55e+03 | 2.03e+03 time/ fps | 121 iterations | 898 | 3797 time_elapsed total timesteps | 459776 train/ 0.0037479294 approx_kl 0.00859 clip_fraction | 0.2 clip range entropy_loss | -1.06 explained variance | 0.928 | 1e-06 learning_rate loss | 42.5 n_updates 8970 policy_gradient_loss | -0.00166 value_loss | 106 | 1.55e+03 ep len mean ep_rew_mean | 2.04e+03 time/ | 121 fps | 899 iterations time_elapsed | 3802 total_timesteps | 460288 0 0024055457 approx kl clip_fraction | 0 0.2 clip range entropy_loss | -1.13 explained_variance | -0.366 learning_rate | 1e-06 | 88.7 loss | 8980 n_updates policy_gradient_loss | -0.00142 | 267 value loss rollout/ | 1.55e+03 ep_len_mean ep_rew_mean | 2.04e+03 time/ fps | 121 iterations time elapsed | 3806 total_timesteps 460800 train/ 0.0035227227 approx kl clip fraction 0.0273 clip_range 0.2 entropy_loss | -1.26 explained_variance | 0.627 learning_rate | 1e-06 | 249 loss

| 8990

policy_gradient_loss | -0.00371

n updates

value_loss	499
rollout/ ep_len_mean ep_rew_mean	1.55e+03
time/ fps iterations time elapsed	
total_timesteps train/ approx kl	461312
clip_fraction clip_range entropy_loss	0.0266 0.2 -1.12
<pre> explained_variance learning_rate loss n updates</pre>	0.59 1e-06 68.9 9000
. = .	-0.00366
rollout/ ep_len_mean ep_rew_mean time/	
fps iterations time_elapsed total timesteps	121
train/ approx_kl clip_fraction	401024
clip_range entropy_loss explained_variance	0.2 -1.03 0.798
<pre>learning_rate loss n_updates policy_gradient_loss</pre>	1e-06
value_loss	147
rollout/	l I
ep_len_mean ep_rew_mean time/	1.56e+03 2.03e+03
fps iterations time_elapsed total timesteps	121
train/ approx_kl clip_fraction	 0.0031565567 0.0127
clip_range entropy_loss explained_variance	0.2 -1.02 0.936
	1e-06
value_loss	85.9
rollout/ ep_len_mean ep_rew_mean	 1.56e+03 2.03e+03
time/ fps iterations	
<pre> time_elapsed total_timesteps train/ approx kl</pre>	3823
approx_kt clip_fraction clip_range entropy_loss explained variance	0.0053832596 0.0154 0.2 -1.08
learning_rate loss n_updates	1e-06 360 9030

policy_gradient_loss value_loss	-0.00351 494
rollout/	I
ep_len_mean	1.56e+03
ep_rew_mean	2.03e+03
time/	
fps	121
iterations	905
time_elapsed	3827
total_timesteps	463360
train/	0 0001000710
approx_kl	0.0021388712
clip_fraction	0.00156 0.2
clip_range	0.2
<pre> entropy_loss explained variance</pre>	0.615
learning rate	1e-06
loss	16-00 96.6
n updates	90.0 9040
. = .	-0.000108
value loss	261
rollout/	i I
ep_len_mean	1.56e+03
ep_rew_mean	2.03e+03
time/	
fps	121
iterations	906
time_elapsed	3831
total_timesteps	463872
train/	
approx_kl	0.001177311
clip_fraction	0
clip_range	0.2
entropy_loss	-1.22
explained_variance	0.816
learning_rate	1e-06
l loss	99.5 9050
<pre> n_updates policy_gradient_loss </pre>	0.00134
value loss	383
Value_1035	
rollout/	
ep_len_mean	1.56e+03
ep_rew_mean	2.03e+03
time/	
fps	121
iterations	907
time_elapsed	3835
total_timesteps	464384
train/	0 000225202
approx_kl	0.008335392 0.0264
clip_fraction	0.0204
clip_range	0.2
<pre> entropy_loss explained variance</pre>	-1.06 0.886
learning rate	0.000 1e-06
loss	51.8
n updates	9060
policy_gradient_loss	0.000744
value loss	136
rollout/	
ep_len_mean	1.57e+03
ep_rew_mean	2.03e+03

ep_ı time/ fps 121 iterations
time_elapsed
total_timesteps 908 3840 464896 | train/ approx_kl 0.0012492028 clip_fraction
clip_range
entropy_loss
explained_variance
learning_rate 0 0.2 | -0.851 0.901 1e-06 loss 128

n_updates	9070
policy_gradient_loss	
value_loss	182
rollout/	
ep_len_mean	1.57e+03 2.03e+03
ep_rew_mean time/	2.03e+03
fps	121
iterations	909
<pre> time_elapsed total timesteps</pre>	3844 465408
totat_timesteps train/	403408
approx_kl	0.004506969
clip_fraction	0.0273
<pre> clip_range entropy_loss</pre>	0.2 -1.22
explained variance	0.711
learning_rate	le-06
loss	228
n_updates	9080
<pre>policy_gradient_loss value loss</pre>	0.00276 430
rollout/ ep len mean	 1.56e+03
ep_cen_mean	2.03e+03
time/	i i
fps	121
<pre> iterations time elapsed</pre>	910 3848
total timesteps	465920
train/	
approx_kl	0.0025662445
clip_fraction	0.000195
<pre> clip_range entropy_loss</pre>	0.2 -1.14
explained variance	0.88
learning_rate	1e-06
loss	53.2
<pre> n_updates policy_gradient_loss </pre>	9090 -0.00211
value_loss	160
rollout/	
ep len mean	1.56e+03
ep_rew_mean	2.03e+03
time/	
fps iterations	121 911
time elapsed	3853
total timesteps	466432
train/	
approx_kl	0.0010185422
<pre> clip_fraction clip_range</pre>	0 0.2
entropy_loss	-1.25
<pre> explained_variance </pre>	0.236
learning_rate	1e-06
loss n_updates	345 9100
	-0.0011
	1.04e+03
rollout/	
ep_len_mean	1.56e+03
ep_rew_mean	2.03e+03
time/	
fps iterations	121 912
time_elapsed	3857
total_timesteps	466944
train/	0.004270515
approx_kl clip_fraction	0.004379515 0.0158
clip_fraction clip range	0.0138
entropy_loss	-1.14
explained_variance	0.908
learning_rate	1e-06

```
loss
                      | 27.6
                      | 9110
  n_updates
  policy_gradient_loss | -0.0025
  value_loss | 93.6
rollout/
  ep_len_mean
                        1.57e+03
  ep_rew_mean
                      | 2.04e+03
time/
  fps
                      | 121
                      | 913
  iterations
  time elapsed
                      | 3861
  total_timesteps
                      | 467456
train/
                      0.0044457912
  approx_kl
  clip fraction
                      0.0295
                      0.2
  clip_range
  entropy_loss
                      | -1.03
  explained_variance | 0.948
                      | 1e-06
  learning_rate
                      | 41.8
  n updates
                      | 9120
  policy_gradient_loss | -0.00506
  value loss
rollout/
  ep len mean
                      | 2.04e+03
  ep_rew_mean
time/
                      I 121
  fps
                      | 914
  iterations
  time_elapsed
                     | 3865
  total_timesteps
                      | 467968
train/
  approx kl
                      0.0019094923
                      | 0.00703
  clip_fraction
  clip_range
                      0.2
  entropy_loss
                      | -1.1
  explained_variance | 0.768
                      | 1e-06
  learning_rate
                      | 89.2
  n_updates
                      I 9130
  policy gradient loss | -0.00148
  value_loss | 479
  ep_len_mean
                      | 1.57e+03
  ep_rew_mean
                      | 2.04e+03
time/
  fps
                      | 121
  iterations
                      | 915
  time_elapsed
                      | 3869
  total_timesteps
                      | 468480
train/
  approx_kl
                      | 0.0044031357
  clip_fraction
                      0.2
  clip_range
                      | -1.06
  entropy_loss
  explained_variance
                     | 0.816
  learning_rate
                      I 1e-06
  loss
  n updates
                      9140
  policy_gradient_loss | -0.00184
  value_loss
                      | 201
rollout/
  ep_len_mean
                        1.57e+03
                      | 2.04e+03
  ep_rew_mean
time/
                        121
  fps
                      | 916
  iterations
  time elapsed
                      | 3874
                      | 468992
  total_timesteps
train/
                      0.009955761
  approx_kl
  clip_fraction
                      0.0471
  clip_range
                      0.2
  entropy loss
                      | -1.25
                     | 0.745
  explained_variance
```

loss	learning rate	1e-06
n_updates	· · ·	
value_loss 169	!	
rollout/ ep_len_mean 1.57e+03 ep_rew_mean 2.04e+03 time/ fps 121 iterations 917 time_elapsed 3878 total_timesteps 469504 train/ approx_kl 0.009216119 clip_fraction 0.0455 clip_range 0.2 entropy_loss -1.22 explained_variance 0.495 earning_rate le-06 loss 394 n_updates 9160 policy_gradient_loss 756 earning_rate 1.57e+03 ep_rew_mean 2.03e+03 time/ approx_kl 0.0020442456 clip_fraction 0 clip_range 0.2 entropy_loss -1.15 explained_variance 0.91 learning_rate le-06 loss 50.1 n_updates 9170 policy_gradient_loss -0.000835 value_loss -1.15 explained_variance 0.91 learning_rate le-06 loss 50.1 n_updates 9170 policy_gradient_loss -0.000835 value_loss 143 value_loss 143 value_loss 143 value_loss 143 value_loss -1.15 explained_variance 0.91 learning_rate le-06 loss value_loss 143 value_loss -1.15 explained_variance 0.91 learning_rate le-06 loss value_loss -1.15 explained_variance 0.91 learning_rate le-06 loss value_loss -1.15 explained_variance 0.91 learning_rate le-06 loss -1.15 explained_variance 0.91 learning_rate le-06 loss -1.16 explained_variance 0.000835 value_loss -1.16 explained_variance 0.737 learning_rate le-06 loss 652 n_updates 9190 value_loss -1.11 explained_variance 0.737 learning_rate le-06 loss 652 n_updates 9180 policy_gradient_loss 0.000704 value_loss 703 value_los		-0.00587
ep_len_mean 1.57e+03 ep_rew_mean 2.04e+03 time/ fps 121 iterations 917 time_elapsed 3878 total_timesteps 469504 train/ approx_kl 0.009216119 clip_fraction 0.0455 clip_range 0.2 entropy_loss -1.22 explained_variance 0.405 learning_rate 1e-06 loss 394 n_updates 9160 policy_gradient_loss 756 value_loss 756	value_loss	169
ep_len_mean 1.57e+03 ep_rew_mean 2.04e+03 time/ fps 121 iterations 917 time_elapsed 3878 total_timesteps 469504 train/ approx_kl 0.009216119 clip_range 0.2 entropy_loss -1.22 explained_variance 0.405 learning_rate 1e-06 loss 394 n_updates 9160 policy_gradient_loss 756 value_loss 756 value_loss 756 value_loss 1.15 explained_variance 0.0020442456 clip_range 0.2 entropy_loss -1.15 explained_variance 0.0020442456 clip_range 0.2 entropy_loss -1.15 explained_variance 0.91 learning_rate 1e-06 loss 50.1 n_updates 9170 policy_gradient_loss 750.1 n_updates 9170 policy_gradient_loss value_loss 143 value_loss 143 value_loss 143 value_loss 143 value_loss 143 value_loss 143 value_loss 143 value_loss 157e+03 ep_rew_mean 1.57e+03 ep_rew_mean		
ep_len_mean 1.57e+03 ep_rew_mean 2.04e+03 time/ fps 121 iterations 917 time_elapsed 3878 total_timesteps 469504 train/ approx_kl 0.009216119 clip_range 0.2 entropy_loss -1.22 explained_variance 0.405 learning_rate 1e-06 loss 394 n_updates 9160 policy_gradient_loss 756 value_loss 756 value_loss 756 value_loss 1.15 explained_variance 0.0020442456 clip_range 0.2 entropy_loss -1.15 explained_variance 0.0020442456 clip_range 0.2 entropy_loss -1.15 explained_variance 0.91 learning_rate 1e-06 loss 50.1 n_updates 9170 policy_gradient_loss 750.1 n_updates 9170 policy_gradient_loss value_loss 143 value_loss 143 value_loss 143 value_loss 143 value_loss 143 value_loss 143 value_loss 143 value_loss 157e+03 ep_rew_mean 1.57e+03 ep_rew_mean	rollout/	I I
ep_rew_mean	!	l 1.57e+03 l
time/		
iterations		i i
time_elapsed 3878 total_timesteps 469504 train/	fps	121
total_timesteps 469504 train/	•	
train/		1 1
approx_kl 0.009216119 clip_fraction 0.0455 clip_range 0.2 entropy_loss -1.22 explained_variance 0.405 learning_rate 1e-06 loss 394 n_updates 9160 policy_gradient_loss -0.00636 value_loss 756	<u> </u>	469504
clip_fraction 0.0455 clip_range 0.2 entropy_loss -1.22 explained_variance 0.405 learning_rate 1e-06 loss 394 n_updates policy_gradient_loss -0.00636 value_loss 756		
clip_range		
entropy_loss		:
explained_variance 0.405 learning_rate 1e-06 loss 394 n_updates 9160 policy_gradient_loss -0.00636 value_loss 756	· · · · · · · · · · · · · · · · · · ·	
loss		0.405
n_updates	learning_rate	1e-06
policy_gradient_loss	loss	
value_loss		1 1
rollout/ ep_len_mean		
ep_len_mean	value_loss	/56
ep_len_mean		
ep_len_mean	rollout/	
ep_rew_mean		1.57e+03
time/	· · · · · · · · · · · · · · · · · · ·	
iterations	· · · · · · · · · · · · · · · · · · ·	į į
time_elapsed		121
total_timesteps	•	918
train/	· — ·	1 1
approx_kl	<u> </u>	470016
clip_fraction 0 clip_range 0.2 entropy_loss -1.15 explained_variance 0.91 learning_rate 1e-06 loss 50.1 n_updates 9170 policy_gradient_loss -0.000835 value_loss 143 1	!	
clip_range		!
entropy_loss		1 '
explained_variance 0.91 learning_rate 1e-06 loss 50.1 n_updates 9170 policy_gradient_loss -0.000835 value_loss 143	ctip_range entropy loss	
learning_rate		
loss	• • •	
policy_gradient_loss -0.000835 value_loss 143 143	!	
value_loss	n_updates	9170
rollout/		-0.000835
ep_len_mean 1.57e+03 ep_rew_mean 2.03e+03 time/ fps 121 iterations 919 time_elapsed 3887 total_timesteps 470528 train/ approx_kl 0.005116446 clip_fraction 0.0111 clip_range 0.2 entropy_loss -1.1 explained_variance 0.737 learning_rate 1e-06 loss 652 n_updates 9180 policy_gradient_loss 0.000704 value_loss 703 rollout/ ep_len_mean 1.57e+03 ep_rew_mean 2.03e+03 time/ fps 121 iterations 920 time_elapsed 3891	value_loss	143
ep_len_mean 1.57e+03 ep_rew_mean 2.03e+03 time/ fps 121 iterations 919 time_elapsed 3887 total_timesteps 470528 train/ approx_kl 0.005116446 clip_fraction 0.0111 clip_range 0.2 entropy_loss -1.1 explained_variance 0.737 learning_rate 1e-06 loss 652 n_updates 9180 policy_gradient_loss 0.000704 value_loss 703 rollout/ ep_len_mean 1.57e+03 ep_rew_mean 2.03e+03 time/ fps 121 iterations 920 time_elapsed 3891		
ep_len_mean 1.57e+03 ep_rew_mean 2.03e+03 time/ fps 121 iterations 919 time_elapsed 3887 total_timesteps 470528 train/ approx_kl 0.005116446 clip_fraction 0.0111 clip_range 0.2 entropy_loss -1.1 explained_variance 0.737 learning_rate 1e-06 loss 652 n_updates 9180 policy_gradient_loss 0.000704 value_loss 703 rollout/ ep_len_mean 1.57e+03 ep_rew_mean 2.03e+03 time/ fps 121 iterations 920 time_elapsed 3891	L rollout/	I I
ep_rew_mean	1	
time/ fps		
fps	• •	2.036.03
time_elapsed 3887 total_timesteps 470528 train/ 0.005116446 approx_kl 0.005116446 clip_fraction 0.0111 clip_range 0.2 entropy_loss -1.1 explained_variance 0.737 learning_rate 1e-06 loss 652 n_updates 9180 policy_gradient_loss 0.000704 value_loss 703 rollout/ ep_len_mean ep_rew_mean 2.03e+03 time/ fps iterations 920 time_elapsed 3891		121
total_timesteps 470528 train/	iterations	919
train/	time_elapsed	3887
approx_kl	<pre> total_timesteps</pre>	470528
clip_fraction 0.0111 clip_range 0.2 entropy_loss -1.1 explained_variance 0.737 learning_rate 1e-06 loss 652 n_updates 9180 policy_gradient_loss 0.000704 value_loss 703		
clip_range		
entropy_loss		
explained_variance 0.737 learning_rate 1e-06 loss 652 n_updates 9180 policy_gradient_loss 0.000704 value_loss 703		
learning_rate 1e-06 loss 652 n_updates 9180 policy_gradient_loss 0.000704 value_loss 703		
loss		:
n_updates	· ·	
value_loss	!	
value_loss	policy gradient loss	0.000704
rollout/		
ep_len_mean 1.57e+03 ep_rew_mean 2.03e+03 time/ fps 121 iterations 920 time_elapsed 3891		
ep_len_mean 1.57e+03 ep_rew_mean 2.03e+03 time/ fps 121 iterations 920 time_elapsed 3891	L ==11==±/	
ep_rew_mean		
time/		
fps 121 iterations 920 time_elapsed 3891		2.038+03
iterations 920 time_elapsed 3891	!	ı 121
time_elapsed 3891		
	•	!
1 172010 1	total_timesteps	471040
train/		ı i
approx_kl 0.01178606		
clip_fraction 0.0324		:
clip_range	= 3	
entropy_loss -1.28	entropy_loss	-1.28

```
explained variance
                     0.807
  learning_rate
                      | 1e-06
                      77.2
  loss
                      | 9190
  n_updates
  policy_gradient_loss | -0.00908
  value loss
                      | 150
                        1.57e+03
  ep_len_mean
  ep_rew_mean
                      | 2.03e+03
time/
  fps
                      | 121
  iterations
                      | 921
  time elapsed
                      3896
  total timesteps
                      | 471552
train/
                      | 0.0016094659
  approx_kl
  clip fraction
  clip_range
                      0.2
                      | -1.25
  entropy_loss
  explained_variance | 0.864
                      | 1e-06
  learning_rate
                      | 72.5
  n updates
                      9200
  policy_gradient_loss | -0.00177
  value loss | 172
rollout/
  ep len mean
                        1.58e+03
                      | 2.04e+03
  ep_rew_mean
                      | 121
  fps
                      | 922
  iterations
                      3900
  time_elapsed
  total_timesteps
                      | 472064
train/
  approx_kl
                      | 0.0018635687
                      0.00156
  clip_fraction
  clip_range
                      0.2
                      | -1.32
  entropy_loss
  explained_variance | 0.816
                      | 1e-06
  learning_rate
                      | 76.9
  n updates
                      | 9210
  policy_gradient_loss | 0.000104
  value loss | 178
                      | 1.58e+03
  ep_len_mean
  ep_rew_mean
                      | 2.04e+03
time/
                      | 121
  fps
  iterations
                     | 3904
  time_elapsed
  total_timesteps
                      | 472576
train/
                      0.0056813965
  approx kl
  clip_fraction
                      0.00645
  clip range
                      0.2
  entropy_loss
                      | -1.27
  explained variance | 0.666
  learning_rate
                      | 1e-06
  loss
                      | 494
                      9220
  n_updates
  policy_gradient_loss | -0.00678
  value_loss
                      | 1.57e+03
  ep_len_mean
                      2.03e+03
  ep rew mean
time/
  fps
                      | 924
  iterations
  time elapsed
                        3908
                      | 473088
  total_timesteps
train/
                      | 0.005191534
  approx_kl
  clip fraction
                      0.0041
  clip_range
                      0.2
```

loss n_updates	-1.31
rollout/	
<pre> ep_len_mean ep rew mean</pre>	1.57e+03 2.03e+03
time/	
fps	121
iterations	925
<pre>time_elapsed total timesteps</pre>	3912 473600
train/	475000
approx_kl	0.004546099
clip_fraction	0
clip_range	0.2
<pre> entropy_loss explained variance</pre>	-1.3 0.757
learning_rate	l 1e-06
loss	233
n_updates	9240
<pre>policy_gradient_loss value loss</pre>	-0.004 447
value_toss	44 7
rollout/	
ep_len_mean ep_rew_mean	1.57e+03 2.03e+03
time/	2.030103
fps	121
iterations	926
time_elapsed	3916
<pre> total_timesteps train/</pre>	474112
approx kl	0.007498593
clip_fraction	0.0521
clip_range	0.2
<pre> entropy_loss explained variance</pre>	-1.16
learning rate	0.893 1e-06
loss	84.7
n_updates	9250
policy_gradient_loss	
value_loss	186
rollout/	
<pre> ep_len_mean ep rew mean</pre>	1.57e+03 2.04e+03
time/	2.046+05
fps	121
iterations	927
<pre> time_elapsed total timesteps</pre>	3921 474624
totat_timesteps train/	474024
approx_kl	0.0016609379
clip_fraction	0
clip_range	0.2
<pre> entropy_loss explained variance</pre>	-1.2 0.908
learning rate	0.906 1e-06
loss	65.9
n_updates	9260
, , , ,	-0.000982
value_loss	131
rollout/	
ep_len_mean	1.57e+03
ep_rew_mean time/	2.04e+03
fps	121
iterations	928
time_elapsed	3925
<pre> total_timesteps train/</pre>	475136
approx kl	
clip_fraction	j 0 j

clip_range	0.2
entropy_loss	-1.27
• • •	0.623
· · · · · · · · · · · · · · · · · · ·	1e-06
loss	140
n_updates	9270
<pre>policy_gradient_loss value loss</pre>	-0.000542
vacue_coss	
rollout/	
ep_len_mean	1.57e+03
ep_rew_mean	2.04e+03
time/	
fps	121
iterations	929
<pre> time_elapsed total timesteps</pre>	3929 475648
train/	475040
approx kl	0.0015467727
	0.0123
clip_range	0.2
	-1.26
<pre> explained_variance </pre>	0.878
learning_rate	le-06
•	72.4
. = .	9280
policy_gradient_loss	
· –	181
rollout/	
ep len mean	1.58e+03
ep rew mean	2.05e+03
time/	i i
fps	121
iterations	930
time_elapsed	3933
total_timesteps	476160
train/ approx kl	 0.0029054033
: <u> </u>	0.0029054055
clip range	0.2
entropy_loss	-1.24
	0.757
learning_rate	le-06
loss	73.5
n_updates	9290
policy_gradient_loss	
value_loss	213
rollout/	
ep_len_mean	1.58e+03
ep_rew_mean	2.05e+03
time/	
fps	121
iterations time elapsed	931 3937
total_timesteps	476672
totat_timesteps train/	110012
approx kl	0.0014408606
clip_fraction	0
clip_range	0.2
entropy_loss	-1.25
• • •	0.755
! _ '	1e-06
loss	180
<pre> n_updates policy gradient loss </pre>	9300
: · · · · · - · :	299
rollout/	
ep_len_mean	1.58e+03
ep_rew_mean	2.05e+03
time/	
fps iterations	121 932
time elapsed	3942
total timesteps	477184
train/	
! ' ' !	0.002563404

```
clip_fraction
                       | 0
                      0.2
   clip_range
   entropy_loss
                      | -1.18
   explained_variance | 0.854
   learning_rate
                      | 1e-06
                      | 61.1
                      | 9310
   n updates
   policy_gradient_loss | -0.00172
   value loss | 87.4
rollout/
  ep len mean
                        1.58e+03
                      | 2.05e+03
  ep_rew_mean
time/
                      1 121
  fps
  iterations
                      | 933
                     | 3946
   time elapsed
  total timesteps
                      | 477696
train/
  approx kl
                      | 0.004741151
   clip_fraction
   clip range
                      0.2
   entropy_loss
                      | -1.24
   explained variance | 0.598
                      | 1e-06
   learning_rate
                      | 768
                      | 9320
   n_updates
   policy_gradient_loss | -0.0027
                      | 609
   value_loss
  ep_len_mean
                      | 1.58e+03
  ep_rew_mean
                      | 2.05e+03
time/
  fps
                      | 121
                      | 934
  iterations
   time_elapsed
                      | 3950
  total_timesteps
                      | 478208
                      | 0.0138628585
  approx kl
   clip_fraction
                      0.0445
                      0.2
   clip range
   entropy loss
                      | -1.2
   explained variance | -0.122
   learning_rate
                      | 1e-06
   loss
                       86.1
   n_updates
                      9330
   policy_gradient_loss | -0.00334
   value_loss
                     | 266
rollout/
                      | 1.58e+03
  ep_len_mean
  ep rew mean
                      | 2.05e+03
time/
  fps
                       | 121
   iterations
                      | 935
   time elapsed
                      3954
   total\_timesteps
                       | 478720
train/
                      0.0005801609
   approx_kl
   clip fraction
                      0.000195
   clip_range
                      0.2
                      -1.14
   entropy_loss
   explained_variance
                     | 0.495
   learning_rate
                       | 1e-06
   loss
                        307
   n updates
   policy_gradient_loss | 2.72e-05
rollout/
  ep len mean
                       1.58e+03
                      | 2.05e+03
  ep_rew_mean
time/
                       | 121
   iterations
                      | 3958
   time_elapsed
   total_timesteps
                       | 479232
train/
```

```
approx_kl
                      0.0069206012
   clip_fraction
                     | 0.0152
  clip_range
entropy_loss
                    | 0.2
                     | -1.23
   explained variance | 0.735
   learning_rate
                    | 1e-06
   loss
                      | 56.4
             9350
   n updates
   policy_gradient_loss | -0.00459
   value_loss | 138
rollout/
                     | 1.58e+03
   ep_len_mean
                     2.05e+03
  ep rew mean
time/
                      | 121
                    | 937
  iterations
  time_elapsed
                    | 3962
  total_timesteps
                      | 479744
train/
  approx_kl
                     | 0.0018267878
   clip_fraction
                     0.2
   clip_range
  entropy_loss
                     | -1.27
   explained_variance | 0.721
   learning_rate | 1e-06
                      | 321
   loss
   n_updates
   policy_gradient_loss | -0.00121
rollout/
  ep len mean
                     | 1.57e+03
                      | 2.05e+03
  ep_rew_mean
time/
                     | 121
  fps
   iterations
                     | 938
                    3968
  time_elapsed
                    480256
  total_timesteps
train/
  approx_kl
                     | 0.012961811
                     0.0668
   clip_fraction
   clip range
                    | 0.2
  entropy_loss | -1.14
explained_variance | 0.895
   learning_rate
                      l 1e-06
                     | 31.6
   n_updates
                      9370
   policy_gradient_loss | -0.00861
   value_loss | 100
rollout/
  ep_len_mean
                     | 1.57e+03
  ep_rew_mean
                    | 2.05e+03
time/
  fps
                      | 121
  iterations
                    | 3972
  time_elapsed
  total timesteps
                    480768
train/
  approx kl
                      0.0008427565
   clip_fraction
                     | 0.2
   clip_range
                      | -1.11
   entropy_loss
   explained_variance | 0.608
                     | 1e-06
   learning_rate
   loss
                      9380
   n_updates
   policy_gradient_loss | -0.00133
   value_loss | 799
rollout/
                    | 1.57e+03
  ep_len_mean
  ep_rew_mean
                     | 2.05e+03
time/
  fps
                      | 121
                     | 940
   iterations
   time elapsed
                      | 3976
   total_timesteps
                      | 481280
```

```
train/
                      0.010468774
   approx kl
   clip fraction
                      0.0219
                      0.2
   clip_range
                      | -1.12
   entropy_loss
   explained_variance | 0.828
   learning_rate | 1e-06
                      | 112
   n updates
   policy_gradient_loss | -0.00697
   value_loss | 190
rollout/
                       1.57e+03
   ep len mean
                      | 2.05e+03
   ep_rew_mean
time/
                      | 121
  fps
   iterations
                      | 941
                      | 3980
   time_elapsed
  total_timesteps
                      | 481792
train/
                      | 0.008344118
  approx kl
   clip_fraction
                      | 0.0217
   clip range
                      0.2
                     | -1.14
   entropy_loss
   explained_variance | 0.923
                      | 1e-06
   learning_rate
                      | 28.3
   loss
                      9400
   n_updates
   policy gradient loss | -0.00335
   value_loss | 92.1
rollout/
                      | 1.58e+03
  ep_len_mean
   ep_rew_mean
                    | 2.06e+03
time/
                      | 121
                      | 942
  iterations
                    | 3984
   time_elapsed
  total_timesteps
                      | 482304
train/
                      0.011626381
  approx kl
   clip_fraction
                      0.0688
  clip_range
entropy_loss
                      0.2
                     | -1.15
   explained_variance | 0.833
   learning_rate
                      | 1e-06
                      | 65.9
   loss
   n_updates
                      | 9410
   policy_gradient_loss | -0.00954
   value loss
                      | 187
  ep_len_mean
                    | 1.58e+03
  ep_rew_mean
                      | 2.06e+03
time/
  fps
                      | 121
                      943
   iterations
   time elapsed
  total timesteps
                      | 482816
train/
                      | 0.005265473
   approx_kl
                      0.0242
   clip_fraction
   clip_range
                      0.2
   entropy_loss
                      | -1.21
   explained_variance | 0.598
                     | 1e-06
   learning_rate
   loss
                      | 361
                      9420
   n updates
   policy_gradient_loss | -0.00726
   value loss
rollout/
   ep len mean
                      | 1.58e+03
  ep_rew_mean
                      | 2.06e+03
time/
                      | 121
  fps
   iterations
                        944
                      3993
   time_elapsed
```

```
{\tt total\_timesteps}
                      | 483328
train/
  approx kl
                      0.0035155741
  clip_fraction
                      0.00957
                      0.2
  clip range
                     | -1.18
  entropy_loss
  explained_variance | 0.928
                      | 1e-06
  learning_rate
                      55.9
  loss
  n_updates
                      9430
  policy_gradient_loss | 0.00139
  value_loss
              | 119
rollout/
  ep len mean
                       1.58e + 03
  ep_rew_mean
                     2.06e+03
time/
  fps
                      | 945
  iterations
                     | 3997
  time elapsed
  total_timesteps
                     | 483840
train/
                      | 0.0017353208
  approx_kl
  clip fraction
  clip_range
                     | 0.2
  entropy loss
                      | -1.18
  explained_variance | 0.936
  learning_rate
                      le-06
                      | 77.4
  loss
                      9440
  n_updates
  policy_gradient_loss | -0.000526
  value loss
                      | 134
rollout/
  ep len mean
                      | 1.58e+03
                      | 2.06e+03
  ep_rew_mean
time/
                      | 121
                     | 946
  iterations
  time_elapsed
                    | 4001
  total timesteps
                      | 484352
train/
                     0.0029766914
  approx kl
                     0.00137
  clip fraction
  clip_range
entropy_loss
                     0.2
                     | -1.17
  explained_variance | 0.736
  learning_rate | 1e-06
  loss
                      | 202
  n updates
                      9450
  policy_gradient_loss | -0.00244
  value loss
rollout/
                    | 1.58e+03
  ep len mean
  ep_rew_mean
                      | 2.06e+03
time/
                      | 121
  fps
                      | 947
  iterations
                     | 4005
  time_elapsed
  total timesteps
  approx kl
                      | 0.002862939
  clip_fraction
  clip range
                      0.2
                      | -1.18
  entropy_loss
  explained_variance | 0.591
                      | 1e-06
  learning_rate
                      | 146
                      | 9460
  n_updates
  policy_gradient_loss | -0.00333
  value_loss
                      | 718
                      | 1.58e+03
  ep_len_mean
  ep_rew_mean
                      | 2.06e+03
time/
                      | 121
  fps
                      | 948
  iterations
```

```
time elapsed
                       | 4009
                        485376
  total_timesteps
train/
                       0.006747674
  approx_kl
                      0.000391
  clip fraction
  clip_range
                       0.2
                       -1.14
  entropy_loss
  explained_variance
                     0.859
                       le-06
  learning_rate
                       | 58.2
  loss
                       9470
  n updates
  policy_gradient_loss | -0.00385
                      | 216
  value loss
rollout/
  ep len mean
                      2.08e+03
  ep rew mean
time/
                       | 121
  fps
  iterations
                      | 949
                      | 4014
  time_elapsed
  total_timesteps
                      | 485888
train/
  approx kl
                      0.0046679564
                      | 0.00234
  clip_fraction
  clip range
                      0.2
  entropy_loss
                       | -1.1
  explained variance | 0.859
                      | 1e-06
  learning_rate
                       | 114
  n_updates
                       1 9480
  policy gradient loss | -0.00263
  value_loss | 229
                      | 1.57e+03
  ep_len_mean
  ep_rew_mean
                      | 2.06e+03
time/
                      | 121
  iterations
                      | 950
                      | 4018
  time_elapsed
  total_timesteps
                       1 486400
                       0.0068948856
  approx kl
  clip_fraction
                      0.015
  clip range
                      0.2
  entropy_loss
                      | -1.12
  explained_variance | 0.286
  learning_rate
                      | 1e-06
                       | 376
  loss
                      | 9490
  n updates
  policy_gradient_loss | -0.00536
  value_loss | 1.01e+03
rollout/
  ep_len_mean
                        1.57e+03
  ep rew mean
                      | 2.06e+03
time/
                        121
  fps
                      | 951
  iterations
  time elapsed
  total_timesteps
                      | 486912
train/
  approx_kl
                      | 0.005636161
  clip_fraction
                      0.0107
  clip_range
                      0.2
                      | -1.13
  entropy_loss
  explained_variance | 0.577
  learning_rate
                       | 1e-06
  loss
                        718
                       9500
  n updates
  policy gradient loss | -0.00478
  value loss
                       | 1.57e+03
  ep len mean
                       | 2.06e+03
  ep_rew_mean
time/
                       | 121
  fps
```

```
iterations
                       | 952
   time_elapsed
                       | 4026
   total timesteps
                       | 487424
train/
                       0.010306371
   approx kl
   clip_fraction
                       | 0.0771
   clip_range
entropy_loss
                       0.2
                       | -1.15
   explained variance
                     0.863
                       | 1e-06
   learning_rate
                        77.8
   loss
                       | 9510
   n_updates
   policy_gradient_loss | -0.00826
                       | 170
   value_loss
   ep len mean
                        1.58e+03
   ep rew mean
                       2.08e+03
time/
                       | 121
  fps
   iterations
                        953
   time elapsed
                        4030
   total_timesteps
                       | 487936
                       | 0.0015000311
   approx_kl
   clip fraction
                       0.00195
                       0.2
   clip_range
   entropy loss
                       | -1.16
   explained_variance | 0.853
   learning_rate
                       | 1e-06
   loss
                       l 175
   n_updates
                       | 9520
   policy_gradient_loss | -0.000328
   value loss
rollout/
   ep_len_mean
                       | 1.58e+03
   ep_rew_mean
                       | 2.08e+03
time/
   fps
                       | 121
                       | 954
   iterations
                       4035
   time elapsed
   total_timesteps
                       | 488448
train/
                       0.0027066283
   approx_kl
   clip fraction
                       0.0187
   clip_range
                       0.2
   entropy_loss
                       | -1.19
   explained_variance | 0.723
   learning_rate
                       | 1e-06
   loss
                       | 246
   n updates
                       | 9530
   policy_gradient_loss | -0.00145
   value loss
rollout/
                       | 1.58e+03
   ep len mean
   ep_rew_mean
                       | 2.08e+03
time/
                       121
   fps
   iterations
                       955
                       4039
   time_elapsed
   total_timesteps
                       488960
train/
   approx kl
                       0.0065925224
   clip_fraction
                       0.00977
   clip range
                       0.2
   entropy_loss
                       | -1.17
   explained variance
                      | 0.878
   learning_rate
                       | 1e-06
   n_updates
                       9540
   policy_gradient_loss | -0.00325
   value loss
                       | 1.58e+03
   ep_len_mean
   ep_rew_mean
                       | 2.08e+03
time/
```

```
fps
                       | 121
                       | 956
   iterations
   time_elapsed
                       4043
   total_timesteps
                       | 489472
train/
   approx_kl
                      0.0036037588
   clip fraction
                      0.2
   clip_range
   entropy_loss
                      | -1.24
   explained_variance | 0.889
   learning_rate
                      | 1e-06
                       | 60.9
   loss
                      | 9550
   n updates
   policy_gradient_loss | -0.00147
   value loss
                       | 142
rollout/
   ep len mean
                        1.58e+03
                      | 2.08e+03
   ep_rew_mean
time/
  fps
                       | 121
   iterations
   time_elapsed
                      | 4047
  total_timesteps
                     | 489984
train/
                      0.0056304936
  approx kl
   clip_fraction
                      | 0.0109
   clip range
                      0.2
                      | -1.24
   entropy_loss
   explained_variance | 0.574
   learning_rate
                      le-06
                       | 367
   n updates
                      9560
   policy gradient loss | -0.00277
                      | 723
   value_loss
rollout/
   ep_len_mean
                        1.57e+03
  ep_rew_mean
                      | 2.08e+03
time/
                       | 121
  iterations
                      | 958
                      | 4052
  time_elapsed
  total_timesteps
                      490496
train/
                      0.003999952
  approx kl
   clip_fraction
   clip_range
                      0.2
                       | -1.3
   entropy_loss
   explained_variance | 0.505
   learning_rate
                      | 1e-06
   loss
                       | 75.3
                      | 9570
   n updates
   policy_gradient_loss | -0.000688
   value_loss
                      | 202
rollout/
                      | 1.57e+03
   ep_len_mean
  ep rew mean
                      2.08e+03
time/
                      121
                      | 959
   iterations
   time elapsed
                      | 4057
   total_timesteps
                      | 491008
train/
                       | 0.001802227
  approx_kl
   clip_fraction
   clip_range
                      0.2
   entropy_loss
                      | -1.31
   explained variance | 0.784
   learning rate
                        1e-06
                       1 240
   loss
   n updates
                       9580
   policy_gradient_loss | 0.000303
rollout/
  ep len mean
                      | 1.57e+03
                      | 2.08e+03
   ep_rew_mean
```

```
time/
                        121
   fps
   iterations
                        960
                        4061
   time_elapsed
                       | 491520
   total_timesteps
                        0.009245664
   approx kl
                       0.00977
   clip_fraction
   clip_range
                       0.2
   entropy_loss
                       | -1.22
   explained_variance | 0.914
   learning_rate
                       | 1e-06
                       | 69.3
   loss
                       | 9590
   n_updates
   policy_gradient_loss | -0.00286
   value_loss
                       | 179
rollout/
   ep_len_mean
                        1.57e+03
                      | 2.08e+03
   ep_rew_mean
time/
                       | 121
  fps
   iterations
                       | 961
   time elapsed
                      | 4065
   total_timesteps
                      1 492032
train/
                       | 0.012521112
  approx_kl
   clip fraction
                      0.0131
   clip_range
                       0.2
   entropy_loss
                      | -1.27
   explained_variance | 0.795
   learning_rate
                       | 1e-06
   loss
                       1 91.6
   n updates
                       | 9600
   policy_gradient_loss | -0.00718
   value loss
   ep_len_mean
                       | 1.57e+03
  ep_rew_mean
                      | 2.08e+03
time/
  fps
                       i 121
   iterations
                       | 962
                      4069
   time elapsed
   total_timesteps
                      | 492544
train/
                      0.0010536385
   approx_kl
   clip_fraction
                      | 0
                      0.2
   clip_range
                       | -1.29
   entropy_loss
   explained_variance | 0.679
                      l 1e-06
   learning_rate
                       | 138
   loss
                       9610
   n updates
   policy_gradient_loss | -0.00101
   value loss
                       | 590
rollout/
                      1.57e+03
   ep len mean
                       | 2.08e+03
   ep rew mean
time/
                       | 121
   fps
   iterations
                      | 963
                       | 4073
   time_elapsed
  total_timesteps
                       | 493056
train/
   approx kl
                       | 0.0022786933
   clip_fraction
                      0.2
   clip range
                       | -1.2
   entropy_loss
   explained variance
                      0.866
                       l 1e-06
   learning_rate
   loss
                       | 113
                       | 9620
   n updates
   policy gradient loss | -0.00129
   value_loss
rollout/
                       | 1.57e+03
  ep_len_mean
```

```
ep rew mean
                       | 2.08e+03
 time/
                         121
    fps
                       | 964
    iterations
                       | 4078
    time elapsed
    total_timesteps
                       493568
 train/
                       0.0005535545
    approx_kl
    clip fraction
                       0.000586
    clip_range
                      | 0.2
    entropy_loss
                       | -1.24
    explained_variance | 0.539
    learning_rate
                       | 1e-06
    loss
                       | 395
    n updates
                       9630
    policy gradient loss | 0.000734
    value loss
 rollout/
                       | 1.57e+03
    ep len mean
                       | 2.09e+03
    ep_rew_mean
 time/
                       | 121
   fps
                       | 965
    iterations
    time_elapsed
                     | 4082
    total timesteps
                       | 494080
 train/
    approx kl
                       0.004805768
                      | 0
    clip_fraction
    clip_range
entropy_loss
                       0.2
                      -1.23
    explained variance | 0.711
    learning_rate
                      | 1e-06
                       | 51.5
    loss
                       9640
    n updates
    policy_gradient_loss | -0.00225
               | 148
    value_loss
 rollout/
    ep len mean
                         1.57e+03
    ep rew mean
                       | 2.09e+03
 time/
                       | 121
   fps
                       966
    iterations
                      | 4086
| 494592
    time_elapsed
    total timesteps
 train/
                       0.0007887166
    approx kl
    clip_fraction
                       0.2
    clip range
    entropy_loss
                       | -1.24
    explained variance | 0.693
                       | 1e-06
    learning_rate
                       | 9650
    n_updates
    policy_gradient_loss | 0.000868
    value_loss | 455
 rollout/
                       | 1.57e+03
    ep len mean
                      2.09e+03
    ep rew mean
 time/
   fps
                       | 121
                       | 967
    iterations
    time elapsed
                      4090
    {\tt total\_timesteps}
                      | 495104
 train/
                       0.0011687325
    approx_kl
    clip fraction
                      0.00215
    clip_range
                      | 0.2
    entropy loss
                       -1.18
    explained_variance | 0.739
    learning_rate
                       le-06
                       | 54.3
    loss
                       9660
    n_updates
    policy_gradient_loss | -0.00103
    value_loss | 131
| rollout/
```

```
ep len mean
                      | 1.57e+03
   ep_rew_mean
                      | 2.09e+03
time/
  fps
                      | 121
                      | 968
   iterations
                      | 4095
   time_elapsed
  total timesteps
                      495616
train/
  approx kl
                      0.004125882
   clip_fraction
                      | 0.0156
   clip_range
                      0.2
   entropy_loss
                      | -1.22
   explained variance | 0.84
                      | 1e-06
   learning_rate
   loss
                      9670
   n_updates
   policy gradient loss | -0.00425
   value_loss | 182
rollout/
                      | 1.58e+03
   ep_len_mean
                     | 2.09e+03
  ep_rew_mean
time/
                      | 121
                     | 969
  iterations
                    4099
   time_elapsed
   total_timesteps
                      | 496128
train/
                      0.009101482
  approx_kl
   clip fraction
                     | 0.0326
  clip_range
                      0.2
  entropy_loss
                      | -1.16
   explained_variance | 0.901
   learning_rate | 1e-06
                      | 53.6
   loss
   n updates
                     | 9680
   policy_gradient_loss | 0.000869
   value_loss | 153
rollout/
   ep len mean
                      | 1.58e+03
  ep_rew_mean
                      2.09e+03
time/
  fps
                      121
  iterations
                      970
   time elapsed
                      | 4103
  total_timesteps
                     | 496640
train/
                      | 0.008090426
  approx_kl
   clip_fraction
                      0.00508
   clip_range
                     | 0.2
  entropy_loss | -1.21
explained_variance | 0.666
                      l 1e-06
   learning_rate
                      | 378
  loss
   n updates
                      | 9690
   policy_gradient_loss | -0.00425
                  | 619
   value loss
rollout/
  ep len mean
                      | 1.57e+03
                      | 2.08e+03
  ep_rew_mean
time/
                      | 121
  fps
   iterations
                      | 971
                     | 4107
   time_elapsed
   total_timesteps
                      | 497152
train/
   approx kl
                      0.0059776325
                     | 0.0084
   clip_fraction
   clip range
                     0.2
   entropy_loss
                      | -1.15
   explained variance | 0.897
                      | 1e-06
   learning_rate
   loss
                      | 52.8
   n updates
                      9700
   policy_gradient_loss | -0.00244
                      | 132
   value_loss
```

```
rollout/
                        1.57e+03
   ep len mean
  ep rew mean
                       | 2.08e+03
time/
  fps
                       | 121
                       | 972
   iterations
   time elapsed
                      i 4111
   total_timesteps
                      | 497664
                      | 0.0034963703
  approx_kl
  clip_fraction
                      | 0.2
   clip_range
  entropy loss
                      | -1.19
   explained variance | 0.577
   learning rate
                      le-06
  loss
                       | 528
                       9710
  n updates
   policy_gradient_loss | -0.00222
   value loss | 670
rollout/
  ep_len_mean
ep_rew_mean
                      | 1.57e+03
                      | 2.08e+03
time/
                      | 121
  fps
                      | 973
   iterations
   time_elapsed
                      | 4116
  total_timesteps
                      | 498176
train/
                      | 0.011094023
   approx_kl
                     0.0084
   clip_fraction
   clip_range
                     0.2
  entropy_loss | -1.27
explained_variance | 0.872
                      l 1e-06
   learning_rate
   loss
                      99.8
                      | 9720
   n updates
   policy_gradient_loss | -0.00849
                      | 315
   value_loss
rollout/
                       1.57e+03
  ep len mean
   ep rew mean
                      | 2.08e+03
time/
                      | 121
  fps
  iterations
  time_elapsed
                     | 4120
  total_timesteps
                      | 498688
train/
  approx kl
                      0.0012877237
                      0.000586
   clip_fraction
  clip_range
entropy_loss
                      0.2
                      | -1.18
   explained variance | 0.885
                      | 1e-06
  learning_rate
   loss
                       | 56.8
                      9730
   n_updates
   policy_gradient_loss | -0.00105
                      | 144
   value_loss
                      | 1.56e+03
   ep_len_mean
  ep_rew_mean
                      2.08e+03
time/
  fps
                      | 975
   iterations
   time elapsed
                      | 4124
  total_timesteps
                      | 499200
                      0.0022775307
  approx_kl
   clip fraction
                      0.000195
   clip_range
                      0.2
   entropy loss
                      | -1.13
   explained_variance
                      0.838
   learning_rate
                        1e-06
                       | 210
   n updates
                       | 9740
   policy_gradient_loss | -0.00261
   value loss
              | 349
```

```
| rollout/
    ep_len_mean
ep_rew_mean
                           1.56e+03
                          2.08e+03
time/
                           121
   fps
    iterations
                           976
    time_elapsed
                          4128
    total_timesteps
                          499712
 train/
    approx_kl
                          0.0042636255
    clip_fraction
                          0
    clip_range
entropy_loss
                          0.2
                           -1.16
    explained variance
                          0.503
    learning_rate
                          le-06
                          262
    n_updates
                          9750
    policy_gradient_loss | -0.00246
value_loss | 874
```

-		
I	rollout/	
	ep_len_mean	1.56e+03
	ep_rew_mean	2.08e+03
	time/	
	fps	121
	iterations	977
	time_elapsed	4134
	total_timesteps	500224
	train/	
	approx_kl	0.007998503
	clip_fraction	0.00313
	clip_range	0.2
	entropy_loss	-1.17
	<pre>explained_variance</pre>	0.802
	learning_rate	1e-06
	loss	80.3
	n_updates	9760
	<pre>policy_gradient_loss</pre>	-0.00297
	value_loss	160

_		
Ī	rollout/	
i	ep_len_mean	1.56e+03
	ep_rew_mean	2.08e+03
	time/	
	fps	121
	iterations	978
	time_elapsed	4138
	total_timesteps	500736
	train/	
	approx_kl	0.0016017942
	clip_fraction	0.00801
	clip_range	0.2
	entropy_loss	-1.16
	explained_variance	0.735
	learning_rate	1e-06
	loss	144
	n_updates	9770
	policy_gradient_loss	-0.00246
1	value loss	426

rollout/	1
ep_len_mean	1.57e+03
ep_rew_mean	2.09e+03
time/	1
fps	121
iterations	979
time_elapsed	4142
total_timesteps	501248
train/	I
approx_kl	0.009042399
clip_fraction	0.0137
clip_range	0.2
entropy_loss	-1.17
<pre> explained_variance </pre>	0.89
learning_rate	1e-06
loss	77.7
n_updates	9780
<pre>policy_gradient_loss </pre>	-0.00404
value_loss	135

rollout/ ep_len_mean | 1.57e+03 ep_rew_mean | 2.09e+03 time/ 121 fps | 980 iterations time elapsed 4146 total_timesteps | 501760 train/ 0.004147846 approx_kl | 0.00195 clip fraction clip_range entropy_loss | 0.2 entropy_loss | -1.18 explained_variance | 0.295 learning_rate l 1e-06 loss | 643 n updates 9790 policy_gradient_loss | -0.0023 | 963 value loss ep_len_mean ep_rew_mean | 1.57e+03 2.09e+03 time/ | 121 fps iterations 981 | 4150 time_elapsed total timesteps | 502272 train/ 0.0026433454 approx kl 0.00723 clip_fraction clip_range entropy_loss | -1.14 explained variance | 0.923 | 1e-06 learning_rate loss | 47.5 n_updates | 9800 policy_gradient_loss | -0.00313 value_loss | 122 rollout/ 1.57e+03 ep len mean 2.09e+03 ep_rew_mean time/ | 121 fps | 982 iterations time_elapsed | 4155 total_timesteps | 502784

0.0073595084 approx kl 0.0303 clip_fraction clip range entropy_loss | -0.979 explained_variance | 0.95 learning_rate | 1e-06 | 61.9 loss | 9810 n_updates policy_gradient_loss | -0.0068 value_loss | 130

	rollout/		ı
	ep_len_mean	1.58e+03	l
	ep_rew_mean	2.1e+03	l
	time/		l
	fps	121	l
	iterations	983	l
	time_elapsed	4159	l
I	total timesteps	503296	ı
ĺ	train/	ĺ	ĺ
	approx_kl	0.0029030931	l
	clip_fraction	0.0166	l
	clip_range	0.2	l
	entropy_loss	-1.1	l
	<pre>explained_variance</pre>	0.856	l
	learning_rate	le-06	l
	loss	50.9	ı
	n_updates	9820	ı
	policy_gradient_loss	-0.000295	

value_loss	163
rollout/ ep len mean	
ep_ten_mean	1.36e+03
time/	
fps	121
iterations	984
time_elapsed	4163
total_timesteps	503808
train/	
approx_kl clip_fraction	0.0022333314 0.000391
clip range	0.2
entropy_loss	-1.17
explained_variance	0.757
learning_rate	1e-06
loss	170
n_updates	9830 -0.00155
<pre>policy_gradient_loss value loss</pre>	392
vacae_coss	
rollout/	
ep_len_mean	1.56e+03
ep_rew_mean	2.09e+03
time/ fps	
iterations	985
time elapsed	4167
total_timesteps	504320
train/	
approx_kl	0.001582175
clip_fraction	0.0041 0.2
clip_range entropy loss	0.2
explained variance	0.823
learning rate	l 1e-06
loss	328
n_updates	9840
1 1 1 1 1	-0.000127
value_loss	353
rollout/	
ep_len_mean	1.56e+03
ep_rew_mean	2.09e+03
time/	
iterations	986
time_elapsed	4171
total_timesteps	504832
train/	
approx_kl	0.008246219
clip_fraction	0.0115 0.2
clip_range entropy_loss	0.2
explained_variance	0.386
learning rate	l 1e-06
loss	132
n_updates	9850
	-0.00517
value_loss	652
rollout/	
ep_len_mean	1.56e+03
ep_rew_mean	2.09e+03
time/	
fps iterations	121 987
Treigrinis	301

iterations
time_elapsed
total_timesteps | 987 4176 505344 | train/ anny
approx_kl
clip_fraction
clip_range
entropy_loss
explained_variance
learning_rate 0.00981761 0.024 0.2 -1.08 0.94 1e-06 loss 80.6 9860 n_updates

policy_gradient_loss value loss	-0.0053 140
vacae_coss	
rollout/	
ep_len_mean	1.56e+03
ep_rew_mean	2.09e+03
time/	
fps	121
<pre> iterations time_elapsed</pre>	988 4180
total_timesteps	505856
train/	1 1
approx_kl	 0.00787165
clip_fraction	0.0105
clip range	0.2
entropy_loss	-0.988
<pre> explained_variance</pre>	0.933
learning_rate	1e-06
loss	62.8
n_updates	9870
	-0.0034
value_loss	182
rollout/	I
ep_len_mean	1.55e+03
ep_rew_mean	2.08e+03
time/	
fps	121
iterations	989
time_elapsed	4184
total_timesteps	506368
train/ approx_kl	 0.0032821652
clip_fraction	0.0032021032
clip_range	0.2
entropy_loss	-0.915
explained variance	0.876
learning_rate	le-06
loss	305
n_updates	9880
1 1 1 2 =	-0.00419
value_loss	388
rollout/	I I
ep_len_mean	1.55e+03
ep rew mean	2.08e+03
time/	i i
fps	121
iterations	990
time_elapsed	4188
total_timesteps	506880
train/	
approx_kl	0.004079993
clip_fraction	0.000781
<pre> clip_range entropy_loss</pre>	0.2 -1.04
entropy_toss explained variance	0.864
i cubication for follow	1

policy_gradient_loss | -0.00622 | 317 value_loss

explained_variance | 0.864

learning_rate

loss

n_updates

le-06

114 9890

rollout/ 1.54e+03 ep_len_mean ep_rew_mean | 2.07e+03 time/ | 121 991 iterations | 4193 time elapsed total_timesteps 507392 train/ . | 0.0015793291 approx_kl 0.00703 clip_fraction clip_range 0.2 entropy_loss | -0.933 explained_variance 0.838 learning_rate | 1e-06 loss 96.8

n_updates policy_gradient_loss value loss	9900 -0.000729 288
i	
rollout/ ep_len_mean	
ep_rew_mean time/	2.05e+03
fps iterations time_elapsed total_timesteps	121 992 4197 507904
<pre> train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n updates</pre>	0.0016849602 0
. = .	-0.0012 821
rollout/	
ep_len_mean ep_rew_mean	1.53e+03 2.05e+03
time/ fps	
iterations	993
time_elapsed	4201
<pre> total_timesteps train/ </pre>	508416
approx_kl	0.0013420088
clip_fraction	0.0043
clip_range	0.2
	-0.975 0.502
learning rate	1e-06
loss	486
n_updates	9920
<pre>policy_gradient_loss value_loss</pre>	-0.000723 616
rollout/ ep_len_mean	 1.53e+03 2.05e+03
ep_rew_mean time/	
fps iterations	121 994
time_elapsed	4205
total_timesteps	508928
train/ approx kl	
clip fraction	0.00742
clip_range	0.2
entropy_loss	-0.885
<pre> explained_variance learning rate </pre>	0.879 1e-06
loss	69.4
n_updates	9930
policy_gradient_loss	-0.00405
value_loss	226
rollout/	1
ep_len_mean	1.53e+03
ep_rew_mean time/	2.05e+03
fps	121
iterations	995
time_elapsed	4209
<pre> total_timesteps train/ </pre>	509440

0.007291479 0.0256 0.2 -0.855 0.447 l 1e-06

ann/
approx_kl
clip_fraction
clip_range
entropy_loss
explained_variance
learning_rate

```
loss
                      | 87.3
                      9940
   n_updates
   policy_gradient_loss | -0.00516
   value loss | 581
rollout/
   ep_len_mean
                        1.53e+03
  ep_rew_mean
                      | 2.05e+03
time/
  fps
                      | 121
                      | 996
  iterations
  time elapsed
                      | 4213
  total_timesteps
                      | 509952
train/
                      0.0035474678
  approx kl
  clip fraction
                      0.0279
                      0.2
   clip_range
   entropy_loss
                      | -0.763
   explained_variance | 0.855
                      | 1e-06
   learning_rate
   loss
                      | 26.7
   n updates
   policy_gradient_loss | -0.0034
   value loss
rollout/
                      | 1.53e+03
  ep len mean
                      | 2.05e+03
  ep_rew_mean
time/
                      | 120
  fps
                      | 997
  iterations
   time_elapsed
                     | 4219
   total timesteps
                      | 510464
train/
  approx kl
                      0.0024591992
                      0.00566
   clip_fraction
   clip_range
                      0.2
   entropy_loss
                      | -0.84
   explained_variance | 0.836
                      | 1e-06
   learning_rate
                      | 130
   n_updates
                      1 9960
   policy gradient loss | -0.00122
   value_loss | 339
  ep len mean
                      | 1.54e+03
  ep_rew_mean
                      | 2.05e+03
time/
                      | 120
  fps
                      998
   iterations
   time_elapsed
                      | 4223
  total_timesteps
                      | 510976
train/
                      | 0.0016845651
  approx kl
   clip_fraction
                      0.00488
                      0.2
   clip_range
                      | -0.882
   entropy_loss
   explained variance | 0.947
                      | 1e-06
   learning_rate
   loss
                      | 9970
   n_updates
   policy_gradient_loss | -0.00139
   value_loss
                      | 56.5
rollout/
  ep_len_mean
                      | 1.54e+03
                      | 2.05e+03
  ep_rew_mean
time/
                      120
  fps
                      | 999
   iterations
   time elapsed
                      511488
  total_timesteps
train/
                      0.002707635
   approx kl
   clip fraction
                      0.00527
                      0.2
   clip_range
   entropy loss
                      | -0.88
   explained_variance
                     0.855
```

learning_rate loss	1e-06 137
	9980
policy_gradient_loss	-0.00308
value_loss	346
rollout/	
ep_len_mean	1.54e+03
ep_rew_mean	2.05e+03
time/	
fps iterations	120 1000
time elapsed	1000 4231
total timesteps	512000
train/	
approx_kl	0.0008048798
<pre>clip_fraction clip range</pre>	0.00195 0.2
entropy_loss	0.2
explained variance	0.676
learning_rate	1e-06
loss	77.9
n_updates	9990
<pre>policy_gradient_loss value_loss</pre>	-0.000189 188
vatue_toss	
rollout/	1 520.02
ep_len_mean ep rew mean	1.52e+03 2.03e+03
time/	2.036703
fps	120
iterations	1001
time_elapsed	4235
total_timesteps	512512
train/ approx kl	l 0.0044052694
clip_fraction	0.0146
clip_range	0.2
entropy_loss	-0.989
. –	0.785
learning_rate loss	1e-06 78.8
n_updates	10000
policy gradient loss	
value_loss	177
rollout/	
ep len mean	1.52e+03
ep_rew_mean	2.03e+03
time/	100
fps iterations	120 1002
time elapsed	4240
total_timesteps	513024
train/	
approx_kl	0.009223793
clip_fraction	0.0307 0.2
<pre>clip_range entropy loss</pre>	⊍.∠ -1.09
explained variance	0.858
learning_rate	le-06
loss	77.2
n_updates	10010
<pre>policy_gradient_loss value loss</pre>	-0.00588 204
rollout/	1 50 00
ep_len_mean	1.52e+03
ep_rew_mean time/	2.03e+03
fps	 120
iterations	1003
time_elapsed	4244
total_timesteps	513536
train/	0 000011111
approx_kl	0.0066111153
	0.0066111153 0.0555 0.2

loss n_updates policy_gradient_loss	0.92 1e-06 17 10020 -0.00757
rollout/ ep len mean	 1.52e+03
ep_rew_mean	2.03e+03
time/ fps	
iterations	1004
<pre> time_elapsed total timesteps</pre>	4248 514048
train/	314046
approx_kl clip_fraction	0.002479935 0.00508
clip_rrange	0.00508
entropy_loss	-1.16
<pre> explained_variance learning rate</pre>	0.533 1e-06
loss	96.9
<pre> n_updates policy_gradient_loss</pre>	10030 -0.00235
value_loss	612
rollout/	
ep_len_mean	1.52e+03
ep_rew_mean time/	2.03e+03
fps	120
iterations	1005
<pre> time_elapsed total_timesteps</pre>	4252 514560
train/	i
approx_kl clip fraction	0.007600826 0.0533
clip_range	0.2
entropy_loss	-1.14
<pre> explained_variance learning rate</pre>	0.901 1e-06
loss	26.3
	10040 -0.00631
	76.9
rollout/	
ep_len_mean	1.52e+03
ep_rew_mean time/	2.03e+03
fps	120
<pre> iterations time elapsed</pre>	1006 4257
total timesteps	515072
train/	
approx_kl clip_fraction	0.0058819475 0.0125
clip_range	0.2
<pre> entropy_loss explained variance</pre>	-1.21 0.753
learning rate	1e-06
loss	48.7
<pre> n_updates policy_gradient_loss</pre>	10050 -0.00347
	109
rollout/	
ep_len_mean	1.53e+03
<pre> ep_rew_mean time/</pre>	2.04e+03
fps	
iterations	1007
<pre> time_elapsed total timesteps</pre>	4261 515584
train/	
approx_kl	0.0017616481
<pre> clip_fraction clip_range</pre>	0 0.2
ı ~a~	

```
entropy_loss
                     | -1.24
  explained_variance | 0.534
  learning_rate | 1e-06
                     | 24.4
  loss
  n updates
                     | 10060
  policy_gradient_loss | -0.0003
  value loss | 112
  ep len mean
                       1.53e+03
  ep_rew_mean
                     | 2.04e+03
time/
                     | 120
  fps
  iterations
                     1008
  time_elapsed
                     | 4265
  total timesteps
                    516096
train/
  approx kl
                     0.0043748314
  clip_fraction
                     0.00332
  clip range
                    | 0.2
  entropy_loss
                     | -1.21
  explained_variance | 0.655
                     | 1e-06
  learning_rate
                    | 10070
  n updates
  policy gradient loss | -0.00485
  value_loss | 485
  ep_len_mean
                     | 1.53e+03
  ep rew mean
                    | 2.04e+03
time/
  fps
                     | 120
                     | 1009
  iterations
  time elapsed
                    4269
                    | 516608
  total_timesteps
train/
                     | 0.0023564352
  approx_kl
  clip_fraction
                    | 0.00137
                    | 0.2
  clip_range
                     | -1.28
  entropy_loss
  explained_variance | 0.932
  learning_rate
                     | 1e-06
                     | 25.1
  loss
  n_updates
                     | 10080
  policy_gradient_loss | -8.67e-05
  value loss
rollout/
                     | 1.53e+03
  ep_len_mean
                     | 2.04e+03
  ep rew mean
time/
                     | 120
                    | 1010
  iterations
  time_elapsed
                    | 4273
  total_timesteps
                     | 517120
train/
                     0.00493191
  approx kl
                    | 0.00391
  clip fraction
  clip_range
                     0.2
  entropy loss
                     | -1.15
  explained variance | 0.739
  learning_rate
                     | 1e-06
                      | 61.9
  loss
  n updates
                     | 10090
  policy_gradient_loss | -0.00309
rollout/
                       1.54e+03
  ep len mean
  ep rew mean
                     | 2.05e+03
time/
                     | 120
  fps
                     | 1011
  iterations
  time_elapsed
                     | 4277
  total_timesteps
                     | 517632
train/
  approx kl
                      | 0.0051432187
  clip_fraction
                     0.00215
```

```
clip_range
                      0.2
   entropy_loss
                      | -1.19
   explained variance | 0.9
   learning_rate
                      | 1e-06
                      | 74.8
   loss
   n updates
                     | 10100
   policy_gradient_loss | -0.004
   value_loss | 136
rollout/
   ep_len_mean
                        1.54e+03
  ep_rew_mean
                      | 2.05e+03
time/
                      120
  fps
                      | 1012
   iterations
   time elapsed
  total timesteps
                     | 518144
train/
                      | 0.0028263973
  approx_kl
   clip_fraction
                     | 0.000781
                     | 0.2
   clip_range
  entropy_loss | -1.26
explained_variance | 0.88
   learning_rate
                     | 1e-06
                     | 57.8
                      | 10110
   n updates
   policy_gradient_loss | -0.00223
   value loss | 185
rollout/
                      | 1.54e+03
   ep len mean
                      2.05e+03
  ep_rew_mean
time/
                      120
  fps
  iterations
                     | 1013
                    | 4286
| 518656
  time_elapsed
  total_timesteps
train/
                      | 0.0011086084
  approx_kl
  clip_fraction
                     | 0.2
   clip_range
                      | -1.22
   entropy_loss
   explained_variance | 0.767
   learning_rate | 1e-06
                      | 62.7
   n updates
                      10120
   policy_gradient_loss | -0.00091
   value_loss | 128
  ep_len_mean
                    1.54e+03
2.05e+03
  ep_rew_mean
                      | 120
                    | 1014
| 4290
| 519168
  iterations
   time_elapsed
  total_timesteps
train/
                     0.0053494214
0.000977
0.2
  approx kl
   clip fraction
   clip_range
                     | -1.14
   entropy_loss
   explained_variance | 0.881
                      | 1e-06
   learning_rate
   loss
                      | 56.7
                      | 10130
   n_updates
   policy_gradient_loss | -0.002
                      | 123
   value_loss
rollout/
                      | 1.54e+03
  ep len mean
  ep_rew_mean
                      2.05e+03
time/
                      | 120
                      | 1015
  iterations
   time elapsed
                      | 519680
  total_timesteps
train/
                      0.00057713257
  approx_kl
```

clip_fraction clip_range	0.000195 0.2 -1.11
learning_rate loss	0.652 1e-06 150
n_updates policy_gradient_loss value_loss	10140 0.000493 568
rollout/ ep_len_mean	
ep_rew_mean time/ fps	2.05e+03 120
iterations time_elapsed total_timesteps train/	1016 4300 520192
approx_kl clip_fraction clip_range	0.002610703 0.00137 0.2
entropy_loss explained_variance learning_rate	-1.12 0.795 1e-06
loss n_updates policy_gradient_loss value_loss	80.2 10150 -0.00239 179
rollout/ ep_len_mean ep_rew_mean	1.54e+03 2.05e+03
time/ fps iterations	120 1017
time_elapsed total_timesteps train/	4304 520704
approx_kl clip_fraction clip_range entropy loss	0.0036609138 0.0109 0.2 -1.3
	0.729 1e-06 182
value_loss	10160 2.25e-05 453
rollout/ ep_len_mean ep_rew_mean	1.54e+03 2.05e+03
time/ fps iterations	
time_elapsed total_timesteps train/	521216
approx_kl clip_fraction clip_range entropy_loss	0.0020171748 0.000977 0.2 -1.22
	0.566 1e-06 288
n_updates policy_gradient_loss	10170 -0.00302 725
rollout/ ep_len_mean ep_rew_mean	1.54e+03 2.05e+03
time/ fps iterations	120 1019
time_elapsed total_timesteps train/	4312 521728

clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss	0.0016513113 0.00137 0.2 -1.09 0.395 1e-06 580 10180 0.000163 630
rollout/ ep_len_mean ep_rew_mean	
time/ fps iterations time_elapsed total_timesteps train/	120
approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates	0.0017108637 0.00137 0.2 -1.17 0.822 1e-06 65.7 10190 -0.00138 130
rollout/	
ep_len_mean ep_rew_mean	1.44e+03 2.03e+03
time/ fps iterations time_elapsed total_timesteps	120 1021 4321 522752
policy_gradient_loss	0.004214179 0.0178 0.2 -1.2 0.905 1e-06 17.8 10200 -0.000224 98.3
rollout/	
ep_len_mean ep_rew_mean	1.44e+03 2.03e+03
time/ fps iterations time_elapsed total_timesteps	120 1022 4325 523264
explained_variance learning_rate loss n_updates policy_gradient_loss	0.002565898 0.0121 0.2 -1.14 0.462 1e-06 450 10210 -0.000873 747
rollout/	
<pre> ep_len_mean ep_rew_mean</pre>	1.44e+03 2.03e+03
time/ fps iterations time_elapsed total_timesteps	120

```
train/
                      0.0027003922
   approx kl
   clip fraction
                      | 0
                      0.2
   clip_range
                      | -1.2
   entropy_loss
   explained_variance | 0.843
                    | 1e-06
   learning_rate
                      | 64.3
   n updates
                     | 10220
   policy_gradient_loss | -0.00176
   value_loss | 126
rollout/
   ep len mean
                        1.41e+03
                      | 2.03e+03
  ep rew mean
time/
                      | 120
  fps
   iterations
                      1024
   time_elapsed
                      | 4333
  total_timesteps
                      | 524288
train/
                      | 0.0031679794
  approx kl
   clip_fraction
                      | 0.0123
   clip range
                      0.2
                      | -1.11
   entropy_loss
   explained_variance | 0.672
                      | 1e-06
   learning_rate
   loss
                      | 10230
   n_updates
   policy_gradient_loss | 0.000169
   value_loss | 171
rollout/
                      | 1.41e+03
  ep_len_mean
   ep_rew_mean
                     | 2.03e+03
time/
  fps
                      | 120
                      | 1025
  iterations
                     | 4337
   time_elapsed
  total_timesteps
                      | 524800
train/
                      0.0015711186
  approx kl
   clip fraction
                      0.2
   clip_range
   entropy_loss
                      | -1.23
   explained variance | 0.733
   learning_rate
                      | 1e-06
   loss
                      | 275
   n_updates
                      | 10240
   policy_gradient_loss | -0.000289
   value loss
  ep_len_mean
                     | 1.41e+03
  ep_rew_mean
                      | 2.03e+03
time/
                      120
  fps
                      | 1026
   iterations
   time elapsed
                      | 4342
  total timesteps
                      | 525312
train/
                      0.0044477363
   approx_kl
                      | 0.00703
   clip_fraction
                      0.2
   clip_range
   entropy_loss
                      | -1.12
   explained_variance | 0.83
                      | 1e-06
   learning_rate
   loss
                      | 70.8
   n updates
                      | 10250
   policy_gradient_loss | -0.00107
   value loss
                      | 194
rollout/
  ep len mean
                      | 1.41e+03
  ep_rew_mean
                      | 2.03e+03
time/
                      | 120
  fps
   iterations
                      | 1027
                      | 4346
   time_elapsed
```

total_timesteps	525824
train/ approx_kl clip_fraction clip_range entropy_loss	0.0047645085 0.0104 0.2 -0.992
explained_variance learning_rate loss n updates	0.87 1e-06 62.6 10260
policy_gradient_loss value_loss	-0.00495 177
rollout/	
ep_len_mean ep_rew_mean	1.41e+03 2.03e+03
time/ fps	
iterations	1028
time_elapsed	4350
<pre> total_timesteps train/</pre>	526336
approx kl	 0.0026034908
clip_fraction	0
clip_range	0.2
entropy_loss	-0.996
<pre> explained_variance learning rate</pre>	0.818 1e-06
l loss	62.6
n updates	10270
policy_gradient_loss	
value_loss	158
rollout/	
ep_len_mean	1.42e+03
ep_rew_mean	2.05e+03
time/ fps	
iterations	1029
time_elapsed	4354
total_timesteps	526848
train/	
approx_kl clip_fraction	0.002858165 0.00508
clip_range	0.2
entropy_loss	-0.935
explained_variance	0.537
<pre> learning_rate loss</pre>	1e-06 215
•	10280
	-0.0047
	513
rollout/	
ep_len_mean	1.42e+03
ep_rew_mean	2.05e+03
time/ fps	
iterations	1030
time_elapsed	4359
total_timesteps	527360
train/	0 0014722674
approx_kl clip fraction	0.0014733674 0.000391
clip range	0.2
entropy_loss	-1.02
explained_variance	0.853
<pre> learning_rate loss</pre>	1e-06 62.6
n updates	62.6 10290
. = .	0.00088
	359
rollout/	
ep len mean	
ep_rew_mean	2.05e+03
time/	į į
fps	
l iterations	120 1031

```
time elapsed
                      | 4363
  total_timesteps
                      | 527872
train/
                      0.0030064322
  approx kl
                      0.00684
  clip fraction
  clip_range
                      0.2
                      i -0.879
  entropy loss
  explained_variance | 0.863
                      l 1e-06
  learning_rate
                      | 68.3
  loss
                      | 10300
  n updates
  policy_gradient_loss | -0.00182
  value loss
rollout/
  ep len mean
                     2.05e+03
  ep rew mean
time/
                      | 120
  fps
  iterations
                      | 1032
                    | 4367
  time_elapsed
  total_timesteps
                    | 528384
train/
  approx kl
                     0.0034180754
                    | 0.0133
  clip_fraction
                     | 0.2
  clip range
  entropy_loss
                      | -0.929
  explained variance | 0.897
                    | 1e-06
  learning_rate
                      | 35.5
                      | 10310
  n updates
  policy gradient loss | -0.00235
  value_loss | 106
                     | 1.4e+03
  ep_len_mean
  ep_rew_mean
                     | 2.05e+03
time/
                     | 120
                    | 1033
  iterations
                    | 4371
  time elapsed
  total_timesteps
                     528896
                      0.0004121262
  approx kl
  clip_fraction
                     | 0.000391
  clip range
                     0.2
  entropy_loss
                     | -0.968
  explained_variance | 0.301
  learning_rate
                     | 1e-06
                      | 547
  loss
  n updates
                      | 10320
  policy_gradient_loss | -0.000862
  value_loss | 819
rollout/
                     | 1.4e+03
  ep_len_mean
  ep_rew_mean
                     | 2.05e+03
time/
                      120
  fps
                     | 1034
  iterations
  time elapsed
                    | 529408
  total_timesteps
train/
                      0.0054247975
  approx_kl
  clip_fraction
                     0.035
  clip_range
                     0.2
  entropy_loss
                     | -0.948
  explained_variance | 0.917
  learning_rate
                      | 1e-06
                      | 39.2
  loss
                      10330
  n updates
  policy gradient loss | -0.00575
  value loss
                      | 1.4e+03
  ep len mean
                      | 2.05e+03
  ep_rew_mean
time/
                      | 120
 fps
```

```
iterations
                       | 1035
   time_elapsed
                       | 4380
   total timesteps
                       | 529920
train/
                       | 0.0015666917
   approx kl
   clip_fraction
                       | 0.00371
   clip_range
entropy_loss
                       0.2
                       | -0.972
   explained variance | 0.89
   learning_rate
                       | 1e-06
                        73.8
   loss
                       | 10340
   n_updates
   policy_gradient_loss | -0.000866
                       | 208
   value_loss
   ep_len_mean
ep_rew_mean
                        1.4e+03
                       2.05e+03
time/
                       | 120
  fps
   iterations
                        1036
   time elapsed
                         4385
   total_timesteps
                       | 530432
                       | 0.0067749796
   approx kl
   clip fraction
                      0.0203
                       0.2
   clip_range
   entropy loss
                       -1.07
   explained_variance | 0.824
   learning_rate
                       | 1e-06
   loss
                       1 32.8
                       | 10350
   n_updates
   policy_gradient_loss | -0.00267
   value loss | 97.2
rollout/
   ep_len_mean
                       | 1.4e+03
   ep_rew_mean
                       | 2.06e+03
time/
  fps
                       | 120
                       | 1037
   iterations
                       | 4389
   time elapsed
   total timesteps
                       | 530944
train/
                       0.0016759295
   approx_kl
                      0.000391
   clip fraction
   clip_range
                      | 0.2
                      | -1.12
   entropy_loss
   explained_variance | 0.773
                       l 1e-06
   learning_rate
   loss
                       | 28.5
   n updates
                       | 10360
   policy_gradient_loss | -0.00146
   value loss
rollout/
                       | 1.4e+03
   ep len mean
   ep_rew_mean
                       | 2.06e+03
time/
                       | 120
   fps
   iterations
                       1038
                      | 4393
   time_elapsed
   total_timesteps
                       531456
train/
   approx kl
                       0.0018226769
                       0.000586
   clip_fraction
   clip range
                       0.2
   entropy_loss
                       | -1.09
   explained variance
                     | 0.586
                       | 1e-06
   learning_rate
                       l 858
   n_updates
                       10370
   policy_gradient_loss | -0.00184
   value loss
                       | 1.39e+03
   ep_len_mean
   ep_rew_mean
                       | 2.06e+03
time/
```

fps iterations	120 1039
<pre>time_elapsed total_timesteps</pre>	4397 531968
train/ approx_kl clip_fraction clip_range entropy_loss explained variance	0.0109220715 0.00996 0.2 -1.05
learning_rate loss	1e-06 17.7
n_updates policy_gradient_loss	10380 -0.00391
value_loss	68.5
rollout/	
ep_len_mean	1.39e+03
ep_rew_mean	2.06e+03
time/ fps	
iterations	1040
time_elapsed	4401
total_timesteps	532480
train/ approx kl	
clip_fraction	0.00313
clip_range	0.2
<pre> entropy_loss explained variance</pre>	-0.968 0.498
	1e-06
loss	294
n_updates	10390
<pre>policy_gradient_loss value_loss</pre>	-0.00229
1 11 /	
rollout/ ep len mean	 1.39e+03
ep_rew_mean	2.07e+03
time/	İ
fps iterations	120 1041
time elapsed	1041 4406
total_timesteps	532992
total_timesteps train/	i i
total_timesteps train/ approx kl	532992 0.0039105187 0.0189
total_timesteps train/	 0.0039105187
<pre>total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss</pre>	 0.0039105187 0.0189 0.2 -1.02
total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance	
<pre>total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss</pre>	 0.0039105187 0.0189 0.2 -1.02
total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates	0.0039105187 0.0189 0.2 -1.02 0.296 1e-06 56.1 10400
<pre>total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss</pre>	0.0039105187 0.0189 0.2 -1.02 0.296 1e-06 56.1 10400 -0.000612
total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates	0.0039105187 0.0189 0.2 -1.02 0.296 1e-06 56.1 10400
total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss	0.0039105187 0.0189 0.2 -1.02 0.296 1e-06 56.1 10400 -0.000612
total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss	0.0039105187 0.0189 0.2 -1.02 0.296 1e-06 56.1 10400 -0.000612 195
total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss	0.0039105187 0.0189 0.2 -1.02 0.296 1e-06 56.1 10400 -0.000612
total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/	0.0039105187 0.0189 0.2 -1.02 0.296 1e-06 56.1 10400 -0.000612 195 1.39e+03 2.07e+03
total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps	0.0039105187 0.0189 0.2 -1.02 0.296 1e-06 56.1 10400 -0.000612 195 1.39e+03 2.07e+03 120
total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations	0.0039105187 0.0189 0.2 -1.02 0.296 1e-06 56.1 10400 -0.000612 195 1.39e+03 2.07e+03
total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps	0.0039105187 0.0189 0.2 -1.02 0.296 1e-06 56.1 10400 -0.000612 195 1.39e+03 2.07e+03 120 1042
total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/	0.0039105187 0.0189 0.2 -1.02 0.296 1e-06 56.1 10400 -0.000612 195
total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl	0.0039105187 0.0189 0.2 -1.02 0.296 1e-06 56.1 10400 -0.000612 195
total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range	0.0039105187 0.0189 0.2 -1.02 0.296 1e-06 56.1 10400 -0.000612 195
total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss	0.0039105187 0.0189 0.2 -1.02 0.296 1e-06 56.1 10400 -0.000612 195
total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance	0.0039105187 0.0189 0.2 -1.02 0.296 1e-06 56.1 104400 -0.000612 195
total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss	0.0039105187 0.0189 0.2 -1.02 0.296 1e-06 56.1 10400 -0.000612 195
total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance loss n_updates	0.0039105187 0.0189 0.2 -1.02 0.296 1e-06 56.1 10400 -0.000612 195
total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss	0.0039105187 0.0189 0.2 -1.02 0.296 1e-06 56.1 10400 -0.000612 195
total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance loss n_updates	0.0039105187 0.0189 0.2 -1.02 0.296 1e-06 56.1 10400 -0.000612 195
total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss	0.0039105187 0.0189 0.2 -1.02 0.296 1e-06 56.1 10400 -0.000612 195
total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/	0.0039105187 0.0189 0.2 -1.02 0.296 1e-06 56.1 10400 -0.000612 195
total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss	0.0039105187 0.0189 0.2 -1.02 0.296 1e-06 56.1 10400 -0.000612 195

```
time/
                        120
   fps
   iterations
                        1043
                      | 4414
   time_elapsed
                      | 534016
   total_timesteps
train/
                        0.00062565855
   approx kl
   clip_fraction
   clip_range
                      0.2
   entropy_loss
                      | -1.06
   explained_variance | 0.913
                      | 1e-06
   learning_rate
                      | 48.5
   loss
                      | 10420
   n_updates
   policy_gradient_loss | -0.00024
   value_loss
                      | 103
rollout/
   ep_len_mean
                        1.39e+03
                     | 2.08e+03
  ep_rew_mean
time/
                      | 120
  fps
                      | 1044
  iterations
                     | 4418
   time elapsed
  total_timesteps
                      534528
train/
                      | 0.00696251
  approx_kl
   clip fraction
                      0.0127
  clip_range
                      0.2
   entropy_loss
   explained_variance | 0.919
                      | 1e-06
   learning_rate
   loss
                      | 51.5
                      | 10430
   n updates
   policy_gradient_loss | -0.00251
   value loss
  ep_len_mean
                      | 1.39e+03
  ep_rew_mean
                     | 2.08e+03
time/
                      120
  fps
  iterations
                      | 1045
                     | 4423
   time elapsed
   total_timesteps
                      | 535040
train/
                      0.0034992332
  approx_kl
                     0.00469
   clip_fraction
   clip_range
                     0.2
                      | -1.15
   entropy_loss
   explained_variance | 0.74
                    | 1e-06
   learning_rate
                      | 71.3
   loss
                      10440
   n updates
   policy_gradient_loss | -0.00297
   value loss
                      | 315
rollout/
                     1.39e+03
   ep len mean
   ep rew mean
                      | 2.08e+03
time/
                      | 120
  fps
                     | 1046
   iterations
   time_elapsed
                      | 4427
  total_timesteps
                      | 535552
train/
   approx kl
                     0.0040583154
                     0.00215
   clip_fraction
   clip range
                     0.2
   entropy_loss
                      | -1.12
   explained variance | 0.892
                      l 1e-06
   learning_rate
                      | 56.1
                      | 10450
   n updates
   policy gradient loss | -0.000799
   value_loss
rollout/
                      | 1.38e+03
  ep_len_mean
```

```
ep rew mean
                       | 2.09e+03
 time/
                         120
    fps
                       | 1047
    iterations
                       | 4431
    time elapsed
    total_timesteps
                       | 536064
 train/
                       0.0031593814
    approx_kl
    clip fraction
                      0.00273
    clip_range
entropy_loss
                      | 0.2
                       | -0.955
    explained_variance | 0.836
    learning_rate
                       | 1e-06
                       | 87.7
    loss
    n updates
                       | 10460
    policy_gradient_loss | 0.00102
    value loss
 rollout/
    ep len mean
                       | 1.38e+03
                       | 2.09e+03
    ep_rew_mean
 time/
                       120
   fps
    iterations
                      | 1048
    time_elapsed
                     | 4435
    total timesteps
                       | 536576
 train/
    approx kl
                       0.00057064753
                      | 0
    clip_fraction
    clip_range
entropy_loss
                       | 0.2
                      -1.03
    explained variance | 0.753
    learning_rate
                      | 1e-06
    loss
                       | 746
    n_updates
                       10470
    policy_gradient_loss | -0.000289
               | 568
    value_loss
 rollout/
                     | 1.37e+03
    ep len mean
    ep rew mean
                       | 2.08e+03
 time/
                       | 120
   fps
                       1049
    iterations
    time_elapsed
                     | 4439
| 537088
    total timesteps
 train/
                       | 0.0079478845
    approx_kl
                       0.023
    clip_fraction
                      0.2
    clip range
                      | -1.06
    entropy_loss
    explained_variance | 0.871
                       l 1e-06
    learning_rate
                       97.1
                      | 10480
    n_updates
    policy_gradient_loss | -0.00697
    value_loss | 192
 rollout/
                     1.37e+03
2.08e+03
    ep len mean
    ep rew mean
 time/
                       120
   fps
                       | 1050
    iterations
    time elapsed
                      | 4444
    total_timesteps
                      | 537600
 train/
                       | 0.0007028675
    approx_kl
    clip fraction
                      | 0.2
    clip_range
    entropy loss
                       -1.15
    explained_variance | 0.721
    learning_rate
                       le-06
                       | 311
    loss
    n_updates
                       | 10490
    policy_gradient_loss | -0.00196
    value loss | 663
| rollout/
```

```
ep len mean
                      | 1.36e+03
                      | 2.09e+03
   ep_rew_mean
time/
                      i 120
  fps
                      1051
   iterations
   time_elapsed
                      | 4448
  total timesteps
                     538112
train/
  approx kl
                      0.0012146638
   clip_fraction
                     | 0.000391
   clip_range
                     0.2
   entropy_loss
                      | -1.06
   explained variance | 0.789
   learning_rate
                      | 1e-06
                      107
   loss
                      1 10500
   n_updates
   policy gradient loss | -0.00118
   value_loss | 219
rollout/
                       1.36e+03
   ep_len_mean
  ep_rew_mean
                    | 2.09e+03
time/
                     | 120
                    | 1052
  iterations
                    | 4452
   time_elapsed
  total_timesteps
                     | 538624
train/
                     0.008164055
  approx_kl
                     0 00352
   clip fraction
  clip_range
                     0.2
  entropy_loss
                     | -1.15
   explained_variance | 0.583
   learning_rate | 1e-06
                     | 256
   loss
   n updates
                    | 10510
   policy_gradient_loss | -0.00711
   value_loss | 878
rollout/
                   | 1.36e+03
   ep len mean
  ep_rew_mean
                     2.09e+03
time/
  fps
                      120
                     | 1053
  iterations
   time elapsed
                     | 4456
  total_timesteps
                    | 539136
train/
                     | 0.0018031427
  approx_kl
   clip_fraction
                     | 0.00117
   clip_range
                    0.2
  entropy_loss | -1
explained_variance | 0.802
                     | 1e-06
   learning_rate
                     | 63
  loss
                      | 10520
   n updates
   policy_gradient_loss | -0.00301
                 | 216
   value loss
rollout/
  ep len mean
                     | 1.36e+03
                     | 2.09e+03
  ep_rew_mean
time/
                      | 120
  fps
  iterations
                      | 1054
                    | 4461
   time_elapsed
   total_timesteps
                     | 539648
train/
   approx kl
                     | 0.0055791335
                    | 0.0326
   clip_fraction
   clip range
                     0.2
   entropy_loss
                      | -1.03
   explained variance | 0.625
                      | 1e-06
   learning_rate
   loss
                      | 331
   n updates
                      | 10530
   policy_gradient_loss | 0.000792
   value_loss
```

```
rollout/
                       1.36e+03
  ep len mean
  ep_rew_mean
                      | 2.08e+03
time/
  fps
                      | 120
                       1055
  iterations
                       4466
  time elapsed
  total_timesteps
                      | 540160
                      | 0.008821404
  approx_kl
  clip_fraction
                     0.00488
                     0.2
  clip_range
  entropy loss
                     | -1.07
  explained variance | 0.811
  learning_rate | 1e-06
                      | 67
  loss
                      | 10540
  n updates
  policy_gradient_loss | -0.00598
  value loss | 188
rollout/
  ep len mean
                      | 1.36e+03
                      | 2.08e+03
  ep_rew_mean
time/
                      | 120
  fps
                    1056
  iterations
  time_elapsed
                     | 4470
  total_timesteps
                      540672
train/
                     0.0047929306
  approx_kl
                    0.0182
  clip_fraction
  clip_range
                     | -1.23
  entropy_loss
  explained variance | 0.862
                      l 1e-06
  learning_rate
                      | 114
                     | 10550
  n_updates
  policy_gradient_loss | -0.00348
                      | 256
  value_loss
rollout/
                      | 1.35e+03
  ep len mean
  ep rew mean
                      | 2.06e+03
time/
                     | 120
  fps
                     | 1057
  iterations
  time_elapsed
                    | 4474
  total timesteps
                     541184
train/
                     0.011354623
  approx kl
                     0.0082
  clip_fraction
  clip_range
entropy_loss
                     0.2
                     | -1.08
  explained variance | 0.916
                     | 1e-06
  learning_rate
  loss
                      | 29.7
                      | 10560
  n_updates
  policy_gradient_loss | -0.00187
                      | 80.3
  value_loss
                     | 1.35e+03
  ep len mean
  ep_rew_mean
                     2.06e+03
time/
  fps
                      | 1058
  iterations
  time elapsed
                     | 4478
                    541696
  total_timesteps
                     0.001580694
  approx_kl
  clip fraction
                     0.00664
  clip range
                     0.2
  entropy loss
                      | -1.06
  explained_variance | 0.516
  learning_rate
                      | 1e-06
                      1 78.8
  n_updates
                      | 10570
  policy_gradient_loss | -0.00212
  value loss | 680
```

```
rollout/
                        1.35e+03
  ep len mean
   ep_rew_mean
                      | 2.06e+03
time/
                      | 120
  fps
                       1059
   iterations
   time elapsed
                      | 4483
  total_timesteps
                     542208
train/
  approx kl
                      | 0.014986156
   clip_fraction
                      | 0.0189
  clip range
                     0.2
   entropy_loss
                      | -1.04
   explained variance | 0.773
                      l 1e-06
   learning_rate
                      91.2
                      | 10580
   n_updates
   policy_gradient_loss | -0.00754
   value_loss | 226
rollout/
   ep_len_mean
                       1.35e+03
  ep_rew_mean
time/
                      | 120
                      | 1060
  iterations
  time elapsed
                     | 4487
                    | 542720
  total_timesteps
                      0.004890504
  approx_kl
                     | 0.000781
   clip_fraction
   clip_range
                     0.2
   entropy loss
                      | -1.01
   explained_variance | 0.801
   learning_rate
                     | 1e-06
  loss
                      | 61
   n_updates
                     | 10590
   policy_gradient_loss | 0.00142
   value_loss | 150
rollout/
   ep len mean
                     | 1.35e+03
  ep_rew_mean
                     2.08e+03
time/
  fps
                      120
                     | 1061
  iterations
                    | 4491
   time elapsed
   total_timesteps
                      | 543232
train/
                      | 0.00095141004
  approx_kl
                     | 0.00234
   clip fraction
   clip_range
                      0.2
   entropy_loss
                      | -1.02
   explained_variance | 0.862
   learning_rate
                    | 1e-06
   loss
                      | 49.5
   n updates
                      | 10600
   policy_gradient_loss | -0.00187
   value loss
                      | 130
                    | 1.35e+03
  ep_len_mean
                      | 2.08e+03
  ep_rew_mean
time/
                      | 120
  fps
                       1062
   iterations
   time_elapsed
                      | 4495
   total_timesteps
                      | 543744
train/
                      0.0073797405
   approx kl
                      0.00898
   clip_fraction
   clip range
                      0.2
   entropy_loss
                      | -1.11
   explained variance
                     0.488
   learning_rate
                      | 1e-06
   loss
                       10610
   n_updates
   policy_gradient_loss | -0.00644
   value_loss
                      | 641
```

rollout/ ep_len_mean | 1.35e+03 ep_rew_mean | 2.08e+03 time/ 1 120 fps iterations | 1063 time elapsed 4500 total_timesteps | 544256 train/ | 0.002170802 approx_kl | 0.000977 clip fraction clip_range entropy_loss 0.2 entropy_loss | -1.02 explained_variance | 0.853 learning_rate l 1e-06 | 107 loss n updates 10620 policy_gradient_loss | -0.00152 value loss | 187 ep_len_mean ep_rew_mean | 1.36e+03 | 2.1e+03 time/ | 120 fps iterations 1064 time_elapsed | 4504 | 544768 total timesteps train/ 0.0007551422 approx kl | 0.00176 clip_fraction 0.2 clip range entropy_loss | -1.1 explained variance | 0.66 learning_rate | 1e-06 loss | 62.8

policy_gradient_loss | 0.00151
value_loss | 179

n_updates

10630

rollout/ | 1.36e+03 ep len mean ep_rew_mean | 2.1e+03 time/ | 120 fps | 1065 iterations time_elapsed | 4508 total_timesteps | 545280 train/ 0.0041533476 approx kl clip_fraction | 0 clip range 0.2 entropy_loss | -1.07 explained_variance | 0.48 learning_rate | 1e-06 240 loss | 10640 n_updates policy_gradient_loss | -0.0031 value_loss | 826

rollout/	
ep_len_mean	1.35e+03
ep_rew_mean	2.09e+03
time/	
fps	120
iterations	1066
time_elapsed	4512
<pre>total_timesteps</pre>	545792
train/	
approx_kl	0.015516053
clip_fraction	0.0211
clip_range	0.2
entropy_loss	-1.07
<pre> explained_variance</pre>	0.73
<pre> learning_rate</pre>	1e-06
loss	79.3
n_updates	10650
<pre>policy_gradient_loss</pre>	-0.00668

value loss	201
rollout/	
ep len mean	1.34e+03
ep_rew_mean	2.08e+03
time/	
fps iterations	120 1067
time elapsed	4516
total_timesteps	546304
train/	0.00670164
approx_kl clip_fraction	0.009679164 0.00137
clip_range	0.2
entropy_loss	-1.02
<pre> explained_variance learning rate</pre>	0.829 1e-06
loss	16-00 240
n_updates	10660
1 1 1 1 1	-0.00417
value_loss	341
rollout/	į į
ep_len_mean	1.32e+03
ep_rew_mean time/	2.07e+03
time/ fps	
iterations	1068
time_elapsed	4521
total_timesteps	546816
train/ approx kl	
clip_fraction	0.00254
clip_range	0.2
entropy_loss	-1.08
<pre> explained_variance learning rate</pre>	0.741 1e-06
l loss	339
n_updates	10670
1 1 1 1 1	-0.00158
value_loss	675
rollout/	
<pre> ep_len_mean ep rew mean</pre>	1.31e+03 2.05e+03
time/	
fps	120
iterations	1069
<pre> time_elapsed total timesteps</pre>	4525 547328
train/	
approx_kl	0.00083059934
clip_fraction	0.0121 0.2
<pre> clip_range entropy_loss</pre>	0.2
explained_variance	0.298
learning_rate	l 1e-06
loss n updates	680 10680
. = .	0.00106
value_loss	833
rollout/	I I
ep_len_mean	1.31e+03
ep_rew_mean	2.05e+03
time/	
fps iterations	120 1070
time_elapsed	4529
<pre> total_timesteps</pre>	547840
train/	0.073650606
approx_kl clip fraction	0.0073659606 0.00176
clip_rraction	0.2
entropy_loss	-0.847
explained_variance	0.449
<pre> learning_rate loss</pre>	1e-06 220
n_updates	10690
	'

policy_gradient_lo value_loss	ss -0.0033 691
rollout/	
ep len mean	
ep_ten_mean	1.5e+03 2.05e+03
time/	
fps	120
iterations	1071
time_elapsed	4533
total_timesteps	548352
train/	
approx_kl	0.012873545 0.102
<pre> clip_fraction clip_range</pre>	0.102
entropy_loss	-0.798
explained variance	
learning_rate	1e-06
loss	34.5
n_updates	10700
policy_gradient_lo	
value_loss	102
rollout/	I I
ep_len_mean	1.3e+03
ep rew mean	2.05e+03
time/	i i
fps	120
iterations	1072
time_elapsed	4537
total_timesteps	548864
train/	
approx_kl clip fraction	0.00156
clip_rraction	0.00130
entropy loss	-0.71
explained variance	
learning_rate	1e-06
loss	267
n_updates	10710
policy_gradient_lo	
value_loss	503
rollout/	I I
ep len mean	1.3e+03
ep rew mean	2.06e+03
time/	i i
fps	120
iterations	1073
time_elapsed	4542
total_timesteps	549376
train/ approx kl	 0.001319227
approx_kt clip_fraction	0.001319227
clip_range	0.2
entropy_loss	-0.732
<pre> explained_variance</pre>	0.708
learning_rate	1e-06
loss	27.4
n_updates	10720
<pre>policy_gradient_lo value_loss</pre>	ss -0.000306 98.4
value_toss	90.4
rollout/	
ep_len_mean	1.3e+03
ep_rew_mean	2.06e+03
time/	
l fps	120

n_updates	10730
policy_gradient_loss	
value_loss	646
rollout/	
ep_len_mean	1.3e+03 2.05e+03
ep_rew_mean time/	2.03e+03
fps	120
iterations	1075
<pre> time_elapsed total timesteps</pre>	4551 550400
train/	
approx_kl	0.0038896387
<pre> clip_fraction clip range</pre>	0.00664 0.2
entropy_loss	-0.769
<pre> explained_variance </pre>	0.693
learning_rate loss	1e-06 45.4
n updates	10740
policy_gradient_loss	-0.00307
value_loss	117
rollout/	
ep_len_mean	1.3e+03
ep_rew_mean time/	2.05e+03
fps	120
iterations	1076
<pre> time_elapsed total timesteps</pre>	4555 550912
totat_timesteps train/	550912
approx_kl	0.0018572957
clip_fraction	0.0523
<pre> clip_range entropy_loss</pre>	0.2 -0.728
explained_variance	0.485
learning_rate	1e-06
loss n updates	429 10750
policy_gradient_loss	-0.000998
value_loss	745
rollout/	
ep_len_mean	1.3e+03
ep_rew_mean time/	2.05e+03
fps	120
iterations	1077
<pre> time_elapsed total_timesteps</pre>	4559 551424
totat_timesteps train/	331424
approx_kl	0.0025127449
clip_fraction	0.00977
<pre> clip_range entropy_loss</pre>	0.2 -0.792
<pre> explained_variance </pre>	0.399
learning_rate	1e-06
loss n updates	31.2 10760
• = •	-0.000488
value_loss	187
rollout/	
ep_len_mean	1.3e+03
ep_rew_mean time/	2.06e+03
fps	120
iterations	1078
time_elapsed	4563
<pre> total_timesteps train/</pre>	551936
approx_kl	0.0014942357
clip_fraction	0.0182
<pre> clip_range entropy_loss</pre>	0.2 -0.805
entropy_toss explained_variance	0.889
learning rate	le-06
1 3_	

loss n_updates policy_gradient_loss value_loss	25.7 10770 -0.00214 71.6
rollout/	
ep_len_mean	1.3e+03
ep_rew_mean	2.06e+03
time/	
fps	120
iterations	1079
time_elapsed	4567
total_timesteps	552448
train/	
approx_kl	0.0024225386
clip_fraction	0.0176
	0.2
entropy_loss	-0.812
explained_variance	0.527 1e-06
learning_rate	1e-06 384
loss	10780
<pre> n_updates policy_gradient_loss </pre>	-0.00174
	611
•••••	
	-
rollout/	1
ep_len_mean	1.29e+03
ep rew mean	2.05e+03
time/	
fps	120
iterations	1080
time elapsed	4572
total timesteps	552960
train/	i
approx kl	0.0008529769
clip_fraction	0 j
clip_range	0.2
entropy_loss	-0.823
<pre> explained_variance </pre>	0.816
learning_rate	1e-06
loss	47.3
n_updates	10790
<pre>policy_gradient_loss </pre>	0.000185
value_loss	131
rollout/	
ep_len_mean	1.29e+03
ep_rew_mean	2.05e+03
time/	120
fps	120
<pre> iterations time elapsed</pre>	1081 4576
total_timesteps	553472
totat_timesteps train/	27774
approx kl	 0.0034895712
· · · · · · · · · · · · · · · · · · ·	0.0054693712
clip_rraction	0.2
entropy_loss	-0.894
	0.42
learning_rate	1e-06
loss	203
n updates	10800
. = .	-0.00408
value loss	679
rollout/	
ep_len_mean	1.27e+03
ep_rew_mean	2.04e+03
time/	
fps	120
iterations	1082
time_elapsed	4580
total_timesteps	553984
train/	
approx_kl	0.004970189
clip_fraction	0.0256
' '_ '	0.2
entropy_loss	-0.927
<pre> explained_variance </pre>	0.771

```
learning_rate
                     | 1e-06
                     | 32.3
  n_updates
                     10810
   policy_gradient_loss | -0.0042
   value_loss | 82.1
  ep_len_mean
ep_rew_mean
                      | 1.27e+03
                    | 2.04e+03
time/
                      | 120
  fps
                     | 1083
  iterations
   time elapsed
                    | 4584
  total timesteps
                    554496
train/
                     0.0025989532
  approx kl
                    | 0.00625
   clip_fraction
  clip_range
entropy_loss
                    | 0.2
                     | -0.952
   explained variance | 0.868
                    | 1e-06
   learning_rate
   loss
                      | 115
              10820
   n_updates
   policy_gradient_loss | -0.000469
   value_loss | 191
rollout/
                    | 1.26e+03
  ep_len_mean
  ep rew mean
                     | 2.02e+03
time/
                     | 120
                    1084
  iterations
   time_elapsed
                     | 4588
                      | 555008
  total_timesteps
train/
                    0.002473962
0.00176
0.2
  approx_kl
   clip_fraction
   clip_range
  entropy_loss
                    | -0.883
   explained_variance | 0.885
   learning_rate | 1e-06
                     | 35.7
   loss
             10830
   n updates
   policy_gradient_loss | -0.00157
   value_loss | 75.7
rollout/
                     | 1.26e+03
  ep_len_mean
  ep_rew_mean
                      | 2.02e+03
time/
                     | 120
  fps
                     | 1085
   iterations
                    i 4592
  time elapsed
                    | 555520
  total_timesteps
train/
                     | 0.00042382325
  approx_kl
  clip_fraction
                     | 0.000391
   clip_range
                    | 0.2
  entropy_loss | -0.807
explained_variance | 0.398
                     l 1e-06
   learning_rate
                     | 422
   n updates
                     | 10840
   policy_gradient_loss | -0.000879
   value loss
             | 632
rollout/
                     | 1.26e+03
   ep len mean
                     | 2.02e+03
  ep_rew_mean
time/
                      | 120
  fps
  iterations
                     1086
                    | 4596
  time_elapsed
  total_timesteps
                     | 556032
train/
                      0.0040432387
  approx kl
                     | 0.0189
   clip_fraction
   clip range
                      0.2
                      | -0.876
   entropy_loss
```

```
explained variance
                     | 0.733
   learning_rate
                      | 1e-06
                      64.7
   loss
                      | 10850
   n_updates
   policy_gradient_loss | -0.000781
   value loss
                        1.26e+03
   ep_len_mean
  ep_rew_mean
                      | 2.02e+03
time/
  fps
                       | 120
   iterations
                        1087
   time elapsed
                      4601
  total timesteps
                      | 556544
train/
                      | 0.0007728194
  approx_kl
   clip fraction
                      0.2
   clip_range
                       | -0.895
   entropy_loss
   explained_variance | 0.102
                        1e-06
   learning_rate
                       | 265
   n updates
                      | 10860
   policy_gradient_loss | -0.000111
   value loss | 1.03e+03
rollout/
   ep len mean
                        1.26e+03
                      | 2.03e+03
  ep_rew_mean
                      | 120
  fps
                      | 1088
   iterations
                      | 4605
  time elapsed
  total_timesteps
                      | 557056
train/
   approx_kl
                      | 0.008203052
                      | 0.0135
   clip_fraction
                      0.2
   clip_range
                      | -0.926
   entropy_loss
   explained_variance | 0.916
                      l 1e-06
   learning_rate
                       | 37
                      | 10870
   n updates
   policy_gradient_loss | -0.00387
   value loss | 114
                        1.26e+03
  ep_len_mean
   ep_rew_mean
                      | 2.03e+03
time/
                       | 120
  fps
                      1089
  iterations
   time_elapsed
                     | 4609
  total_timesteps
                      | 557568
train/
                      0.0010617494
  approx kl
                      | 0
   clip_fraction
   clip range
                      0.2
   entropy_loss
                      | -0.837
   explained variance | 0.357
   learning_rate
                      | 1e-06
   loss
                       | 352
                       | 10880
   n_updates
   policy_gradient_loss | -0.0032
                       | 1.08e+03
   value_loss
                      | 1.26e+03
   ep len mean
                      2.03e+03
  ep rew mean
time/
  fps
                       | 120
                        1090
   iterations
   time elapsed
                        4613
  total_timesteps
                       | 558080
train/
                       | 0.0016489781
   approx_kl
   clip fraction
                       0.00801
   clip_range
                       0.2
```

learning_rate loss n_updates policy_gradient_loss	-0.754
rollout/ ep_len_mean	 1.26e+03
ep_rew_mean time/ fps	2.03e+03
iterations time_elapsed total_timesteps	1091 4617 558592
train/ approx_kl clip_fraction	
<pre> clip_range entropy_loss explained_variance</pre>	0.2 -0.897 0.718
	1e-06 238
n_updates policy_gradient_loss value loss	10900 -0.00755 539
rollout/ ep_len_mean ep rew mean	 1.25e+03 2.02e+03
time/ fps	
iterations time_elapsed	1092 4621
total_timesteps train/ approx kl	559104 0.00557507
clip_fraction clip_range	0.0215 0.2
<pre> entropy_loss explained_variance learning_rate</pre>	-0.807 0.856 1e-06
loss n updates	47.4 10910
policy_gradient_loss value_loss	-0.00292 132
rollout/ ep_len_mean ep_rew_mean	 1.25e+03 2.02e+03
time/ fps	
iterations time_elapsed	1093 4626
<pre> total_timesteps train/</pre>	559616
approx_kl clip_fraction clip range	0.003636196 0.00918 0.2
entropy_loss	0.2 -0.952 0.842
learning_rate loss	1e-06 121
n_updates	10920 -0.00264
value_loss	287
rollout/	
ep_len_mean	1.25e+03 2.02e+03
ep_rew_mean time/ fps	2.02e+03
iterations	1094
<pre>time_elapsed total_timesteps train/</pre>	4631 560128
train/ approx_kl clip_fraction	 0.005822299 0.00215

clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss	0.2 -0.852 0.854 1e-06 37.3 10930 -0.00182 114
rollout/ ep_len_mean ep_rew_mean time/	1.25e+03 2.03e+03
fps iterations time_elapsed total_timesteps train/	120 1095 4635 560640
approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy gradient loss	0.0024232455 0.00156 0.2 -0.797 0.851 1e-06 46.3 10940 -0.00171
value_loss	146
rollout/ ep_len_mean ep_rew_mean time/	1.25e+03 2.03e+03
fps iterations time_elapsed total_timesteps	120 1096 4639 561152
train/ approx_kl clip_fraction clip_range entropy_loss	0.00086450623 0
<pre>explained_variance learning_rate loss n_updates policy_gradient_loss</pre>	0.264 1e-06 822 10950 -0.000549
value_loss	1.25e+03
rollout/ ep_len_mean ep_rew_mean time/	1.25e+03 2.03e+03
fps iterations time_elapsed total_timesteps train/	120 1097 4643 561664
approx_kl clip_fraction clip_range entropy_loss	0.007470068 0.0262 0.2 -0.829
learning_rate loss n_updates policy_gradient_loss	1e-06 42.4 10960 -0.00218
value_loss	91.3
rollout/ ep_len_mean ep_rew_mean time/	1.25e+03 2.03e+03
fps iterations time_elapsed total_timesteps	120 1098 4647 562176
train/ approx_kl	0.0007271728

```
clip_fraction
                      | 0.00723
   clip_range
                      0.2
   entropy_loss
                      | -0.901
   explained_variance | 0.577
   learning_rate
                      | 1e-06
                       | 320
   n updates
                      | 10970
   policy_gradient_loss | -0.00087
   value loss | 698
rollout/
  ep len mean
                        1.26e+03
  ep_rew_mean
                      | 2.05e+03
time/
                      1 120
  fps
                      | 1099
  iterations
                      | 4652
   time elapsed
  total timesteps
                      | 562688
train/
                      | 0.0063981703
  approx kl
   clip_fraction
                      | 0.0139
  clip_range
entropy_loss
                      0.2
                      | -0.843
   explained variance | 0.89
                     | 1e-06
   learning_rate
                      | 74.7
                      | 10980
  n_updates
   policy_gradient_loss | -0.0047
              | 158
   value_loss
  ep len mean
                      | 1.25e+03
  ep_rew_mean
                      | 2.04e+03
time/
  fps
                      | 120
                        1100
  iterations
   time_elapsed
                      | 4656
  total_timesteps
                      | 563200
                      | 0.00045296235
  approx_kl
   clip fraction
                      0.00215
                      0.2
   clip_range
   entropy loss
                      | -0.899
   explained_variance | 0.572
   learning_rate
                      | 1e-06
   loss
                       312
   n_updates
                     | 10990
   policy_gradient_loss | -0.000256
              | 563
   value_loss
rollout/
                      | 1.25e+03
  ep_len_mean
  ep rew mean
                      | 2.04e+03
time/
  fps
                      | 120
   iterations
                      | 1101
   time elapsed
                      | 4660
  total_timesteps
                      | 563712
train/
                      0.0016133022
   approx_kl
   clip fraction
                      0.0102
   clip_range
                      0.2
                      -0.877
   entropy_loss
   explained_variance | 0.506
   learning_rate
                       | 1e-06
   loss
                        560
                        11000
   n updates
   policy_gradient_loss | -0.0027
rollout/
  ep len mean
                      1.25e+03
                      | 2.04e+03
  ep_rew_mean
time/
                       | 120
   iterations
                      | 1102
                      | 4664
   time_elapsed
   total_timesteps
                       | 564224
train/
```

```
approx_kl
                       | 0.0067959353 |
   clip_fraction
                      | 0.0221
                     | 0.2
   clip_range
entropy_loss
                      | -0.832
   explained variance | 0.892
   learning_rate
                     | 1e-06
              | 38.3
| 11010
   loss
   n updates
   policy_gradient_loss | -0.00336
   value_loss | 105
rollout/
  ep_len_mean
ep_rew_mean
                     | 1.26e+03
                      2.04e+03
time/
                       120
                     | 1103
   iterations
   time_elapsed
                     | 4669
   total_timesteps
                       | 564736
train/
                     0.0049847406
   approx_kl
                     0.0475
   clip_fraction
   clip_range
entropy_loss
                     | -0.85
   explained_variance | 0.888
  learning_rate | 1e-06 | 10ss | 86.2 | 11020
   policy_gradient_loss | -0.00629
rollout/
   ep len mean
                      | 1.26e+03
                       | 2.04e+03
   ep_rew_mean
time/
                      | 120
  fps
                    | 1104
| 4673
| 565248
   iterations
   time_elapsed
  total_timesteps
train/
                     0.0016300011
0.00273
   approx kl
   clip_fraction
   clip_range
                     | 0.2
   entropy_loss | -0.897
explained_variance | 0.707
   learning_rate
                       l 1e-06
                      | 450
                      | 11030
   n updates
   policy_gradient_loss | -0.00163
   value_loss | 653
rollout/
   ep_len_mean
                      | 1.25e+03
                     2.03e+03
   ep_rew_mean
time/
                       | 120
  fps
                      | 1105
  iterations
  time_elapsed
                     | 4677
| 565760
  total timesteps
train/
  approx kl
                      0.00088007783
                     | 0.000195
   clip_fraction
                     | 0.2
   clip_range
                       | -0.903
   entropy_loss
   explained variance | 0.823
                      | 1e-06
   learning_rate
                       | 139
   n_updates
                      | 11040
   policy_gradient_loss | -0.00117
   value_loss | 267
rollout/
                     | 1.25e+03
  ep_len_mean
   ep_rew_mean
                      | 2.03e+03
time/
                       | 120
                     | 1106
   iterations
   time_elapsed
                       | 4681
   total_timesteps
                       | 566272
```

```
train/
                       0.0020698411
   approx kl
   clip fraction
                      | 0
                      0.2
   clip_range
                      | -1.07
   entropy_loss
   explained_variance | 0.932
                      l 1e-06
   learning_rate
                      | 37.6
   n updates
                      | 11050
   policy_gradient_loss | -0.00146
   value_loss | 211
rollout/
                        1.25e+03
   ep len mean
                      | 2.03e+03
   ep_rew_mean
time/
                      | 120
  fps
   iterations
                      1107
   time_elapsed
                      | 4685
  total_timesteps
                      | 566784
train/
                      0.0051843696
   approx kl
   clip_fraction
                      | 0.0102
   clip range
                      0.2
                      | -0.957
   entropy_loss
   explained variance | 0.789
                      l 1e-06
   learning_rate
                      | 110
   loss
                      | 11060
   n_updates
   policy gradient loss | -0.00275
   value_loss
                      | 214
rollout/
                       | 1.25e+03
  ep_len_mean
   ep_rew_mean
                     | 2.03e+03
time/
                      | 120
                      | 1108
  iterations
                     | 4690
   time_elapsed
  total_timesteps
                      | 567296
train/
                      0.0059382627
  approx kl
   clip_fraction
                      0.00215
  clip_range
entropy_loss
                      0.2
                      | -1.1
   explained variance | 0.854
   learning_rate
                      | 1e-06
                      | 107
   loss
   n_updates
                       | 11070
   policy_gradient_loss | -0.00363
   value loss
  ep_len_mean
                     | 1.25e+03
  ep_rew_mean
                      | 2.03e+03
time/
                       120
  fps
                      | 1109
   iterations
   time elapsed
  total timesteps
                      | 567808
                      | 0.0113051385
   approx_kl
                      0.0109
   clip_fraction
                      0.2
   clip_range
   entropy_loss
                      | -1.21
   explained_variance | 0.7
                      | 1e-06
   learning_rate
   loss
                       | 267
   n updates
                      | 11080
   policy_gradient_loss | -0.0075
   value loss
rollout/
  ep len mean
                      | 1.25e+03
                      | 2.03e+03
  ep_rew_mean
time/
                      | 120
  fps
   iterations
                       | 1110
                       | 4698
   time_elapsed
```

total timesteps	568320
train/ approx kl	0.0021042733
· · · · · · · · · · · · · · · · · · ·	0.0021042733
! '- :	0.2 -1.07
<pre> explained_variance </pre>	0.804
learning_rate loss	1e-06 79.3
n_updates	11090
! ' , '=' = !	-0.00148
1	
rollout/	
ep_len_mean	1.24e+03
ep_rew_mean time/	2.02e+03
fps	120
<pre> iterations time_elapsed</pre>	1111 4702
<pre> total_timesteps train/</pre>	568832
approx kl	 0.013698354
· ' - '	0.0186 0.2
entropy_loss	-1.04
·	0.805 1e-06
loss	49
<pre> n_updates policy_gradient_loss </pre>	11100 -0.00593
	107
rollout/	
ep_len_mean ep_rew_mean	1.24e+03 2.02e+03
time/	100
fps iterations	120 1112
time_elapsed	4706
<pre> total_timesteps train/</pre>	569344
approx_kl	0.0005856096
<pre> clip_fraction clip_range</pre>	0 0.2
entropy_loss	-1.06 0.555
	1e-06
loss n updates	121 11110
policy_gradient_loss	-0.00055
value_loss	542
rollout/ ep len mean	 1.24e+03
ep_rew_mean	2.02e+03
time/ fps	
iterations	1113
<pre> time_elapsed total_timesteps</pre>	4711 569856
train/ approx kl	 0.012926471
· · · · · · · · · · · · · · · · · · ·	0.0102
clip_range entropy_loss	0.2 -1
explained variance	0.818
!	1e-06 102
n_updates	11120
: ' - ' - ' - '	-0.00568 211
vatac_toss	
rollout/	
ep_len_mean	1.25e+03
ep_rew_mean time/	2.03e+03
fps	120
iterations	1114

time_elapsed	4716
<pre> total_timesteps train/</pre>	570368
approx_kl	0.0038028513
<pre> clip_fraction clip range</pre>	0 0.2
entropy_loss	-1.01
<pre> explained_variance learning rate</pre>	0.914 1e-06
loss	49.1
<pre> n_updates policy_gradient_loss</pre>	11130 -0.00165
value_loss	138
rollout/	
ep_len_mean	1.25e+03
ep_rew_mean time/	2.03e+03
fps	120
<pre> iterations time elapsed</pre>	1115 4720
total_timesteps	570880
train/ approx kl	 0.003996947
clip_fraction	0.0236
<pre> clip_range entropy loss</pre>	0.2 -1.01
entropy_toss explained_variance	0.636
learning_rate loss	1e-06 238
n_updates	11140
1 , , , , =	0.00297
value_loss	853
mallau+/	
rollout/ ep_len_mean	
ep_rew_mean	2.02e+03
time/ fps	 120
iterations	1116
<pre> time_elapsed total_timesteps</pre>	4724 571392
train/	3/1392
approx_kl clip fraction	0.004445058 0.0135
clip_rraction clip_range	0.0133
entropy_loss	-0.985
• • =	0.78 1e-06
loss	43.1
<pre> n_updates policy_gradient_loss</pre>	11150 0.00101
value_loss	191
rollout/	
<pre> ep_len_mean ep_rew_mean</pre>	1.24e+03 2.02e+03
time/	
fps iterations	120 1117
time_elapsed	4728
<pre> total_timesteps train/</pre>	571904
approx_kl	0.008832594
clip_fraction	0.024 0.2
	0.2
explained_variance	0.923
<pre> learning_rate loss</pre>	1e-06 130
n_updates	11160
· · · · · · · · · · · · · · · · · · ·	-0.00677 249
· –	. '
rollout/	
ep_len_mean	1.24e+03
ep_rew_mean time/	2.02e+03
fps	120

```
iterations
                       | 1118
   time_elapsed
                       | 4732
   total timesteps
                       572416
train/
                       0.010406306
   approx kl
   clip_fraction
                       | 0.0336
   clip_range
entropy_loss
                       0.2
                       j -0.979
   explained variance | 0.894
   learning_rate
                       | 1e-06
                        170
   loss
                       | 11170
   n_updates
   policy_gradient_loss | -0.00472
                       | 219
   value_loss
   ep_len_mean
ep_rew_mean
                        1.25e+03
                      2.03e+03
time/
                       | 120
  fps
                       | 1119
   iterations
                     | 4737
| 572928
   time elapsed
   total_timesteps
                      0.0019890582
   approx_kl
   clip fraction
                      0.00234
                      0.2
   clip_range
   entropy loss
                      | -0.963
   explained_variance | 0.909
   learning_rate
                       | 1e-06
   loss
                       1 73.4
                       | 11180
   n_updates
   policy_gradient_loss | -0.00215
   value loss
                     | 172
rollout/
   ep_len_mean
                      | 1.25e+03
   ep_rew_mean
                       | 2.03e+03
time/
   fps
                       | 120
                       | 1120
   iterations
                       | 4741
   time elapsed
   total timesteps
                       | 573440
train/
                      0.0029856097
   approx_kl
                      0.000195
   clip fraction
   clip_range
                      | 0.2
                      | -0.979
   entropy_loss
   explained_variance | 0.625
   learning_rate
                       | 1e-06
   loss
                       | 152
   n updates
                       | 11190
   policy_gradient_loss | -0.0035
   value loss
rollout/
                       1.25e+03
   ep len mean
   ep_rew_mean
                       | 2.02e+03
time/
                       | 120
   fps
   iterations
                      1121
                     | 4745
   time_elapsed
   total_timesteps
                       573952
train/
   approx kl
                       | 0.0018984694
   clip_fraction
   clip range
                       0.2
                       | -0.999
   entropy_loss
   explained variance
                     | 0.811
   learning_rate
                       | 1e-06
                       154
   n_updates
                       11200
   policy_gradient_loss | 0.000134
   value loss
                       | 1.25e+03
   ep_len_mean
   ep_rew_mean
                       | 2.02e+03
time/
```

fps	120
iterations	1122
time_elapsed	4749
<pre> total_timesteps</pre>	574464
train/	
approx_kl	0.002147856
clip_fraction	0.00449
clip range	0.2
entropy loss	-1.09
explained variance	0.914
learning rate	l 1e-06
loss	1 103
n updates	11210
policy_gradient_loss	
value_loss	271
vatac_toss	2/1
rollout/	
ep len mean	
• •	
ep_rew_mean	2.02e+03
time/	
fps	120
iterations	1123
time_elapsed	4753
total_timesteps	574976
train/	
approx_kl	0.00853337
clip_fraction	0.00684
clip_range	0.2
entropy_loss	-0.947
explained_variance	0.841
learning rate	l 1e-06
loss	124
n updates	11220
	-0.00411
value_loss	318
1	
rollout/	1
ep len mean	1.25e+03
ep rew mean	1.23e+03 2.02e+03
time/	2.02C105
fps	120
iterations	1124
time_elapsed	4758
total_timesteps	575488
train/	
approx_kl	0.002897323
clip_fraction	0.00723
clip_range	0.2
entropy_loss	-0.897
explained_variance	0.863
learning_rate	1e-06
loss	47.1
. – .	11230
1 1 2 3 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	-0.000664
value_loss	
	137
	13/
	1 -
rollout/	: I I
	1 -
rollout/	: I I
rollout/ ep_len_mean	 1.25e+03
rollout/ ep_len_mean ep_rew_mean	 1.25e+03
rollout/ ep_len_mean ep_rew_mean time/	1.25e+03
rollout/ ep_len_mean ep_rew_mean time/ fps	1.25e+03
rollout/ ep_len_mean ep_rew_mean time/ fps iterations	1.25e+03
rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed	1.25e+03 2.02e+03
rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl	1.25e+03 2.02e+03
rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/	1.25e+03 2.02e+03
rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl	1.25e+03 2.02e+03
rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range	1.25e+03 2.02e+03
rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss	1.25e+03 2.02e+03 120 1125 4762 576000 10.010559416 0.0207 0.2
rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance	1.25e+03 2.02e+03 120 1125 4762 576000 10.0207 0.2 -0.876 0.834
rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate	1.25e+03 2.02e+03 120 1125 4762 576000 10.0207 0.2 -0.876 0.834 1e-06
rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss	1.25e+03 2.02e+03 120 1125 4762 576000 0.010559416 0.0207 0.2 -0.876 0.834 1e-06 55.2
rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates	1.25e+03 2.02e+03 120 1125 4762 576000 10.010559416 0.0207 0.2 -0.876 0.834 1e-06 55.2 11240
rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss	1.25e+03 2.02e+03 120 1125 4762 576000 10.010559416 0.0207 0.2 -0.876 0.834 1e-06 55.2 11240 -0.00426
rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates	1.25e+03 2.02e+03 120 1125 4762 576000 10.010559416 0.0207 0.2 -0.876 0.834 1e-06 55.2 11240
rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss	1.25e+03 2.02e+03 120 1125 4762 576000 10.010559416 0.0207 0.2 -0.876 0.834 1e-06 55.2 11240 -0.00426
rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss	1.25e+03 2.02e+03 120 1125 4762 576000 10.010559416 0.0207 0.2 -0.876 0.834 1e-06 55.2 11240 -0.00426
rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss	1.25e+03
rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean	1.25e+03
rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean	1.25e+03

```
time/
                        120
   fps
   iterations
                        1126
                      4766
   time_elapsed
                      | 576512
   total_timesteps
train/
                        0.0032156787
   approx kl
   clip_fraction
                      0.00957
   clip range
                      0.2
   entropy_loss
                      | -0.838
   explained_variance | 0.36
                      | 1e-06
   learning_rate
                      | 199
   loss
                      | 11250
   n_updates
   policy_gradient_loss | -0.000217
   value_loss | 515
rollout/
  ep_len_mean
                        1.27e+03
                     | 2.05e+03
  ep_rew_mean
time/
                      | 120
  fps
  iterations
                      | 1127
                     | 4770
   time elapsed
  total_timesteps
                     577024
train/
                      | 0.0020597298
  approx_kl
   clip fraction
                      0.000391
  clip_range
entropy_loss
                      0.2
                      | -1.04
   explained_variance | 0.879
   learning_rate
                      | 1e-06
   loss
                      i 82
   n updates
                      | 11260
   policy_gradient_loss | -0.00114
   value loss
  ep_len_mean
                      | 1.27e+03
  ep_rew_mean
                     | 2.05e+03
time/
  fps
                      1 120
  iterations
                      | 1128
                     | 4774
   time elapsed
   total_timesteps
                      577536
train/
                      | 0.0030929456
  approx_kl
                     | 0.015
   clip_fraction
   clip_range
                      0.2
                      | -0.84
   entropy_loss
   explained_variance | 0.468
                    | 1e-06
   learning_rate
                      | 523
  loss
   n updates
                     | 11270
   policy_gradient_loss | 0.00025
   value loss | 1.05e+03
rollout/
                      1.27e+03
  ep len mean
   ep rew mean
                      | 2.05e+03
time/
                      | 120
  fps
                     | 1129
   iterations
   time_elapsed
                      | 4779
  total_timesteps
                      | 578048
train/
   approx kl
                      | 0.0073055197
                     | 0.0301
   clip_fraction
   clip range
                     0.2
   entropy_loss
                      | -0.721
   explained variance | 0.703
                      l 1e-06
   learning_rate
                      | 39.8
                      | 11280
   n updates
   policy gradient loss | -0.0031
   value_loss
rollout/
                      | 1.27e+03
  ep_len_mean
```

```
ep rew mean
                        | 2.06e+03
 time/
                         120
    fps
                        | 1130
    iterations
                       | 4783
    time elapsed
    total_timesteps
                      578560
                       0.0032601913
    approx_kl
                      0.0287
    clip fraction
    clip_range
entropy_loss
                      | 0.2
                       | -0.652
    explained_variance | 0.66
    learning_rate
                       | 1e-06
                       | 62.9
    loss
    n updates
                       | 11290
    policy_gradient_loss | -0.00374
    value loss | 167
 rollout/
                       | 1.27e+03
    ep len mean
                       | 2.06e+03
    ep_rew_mean
 time/
                       | 120
   fps
                    | 1131
| 4787
| 579072
    iterations
    time_elapsed
    total timesteps
 train/
    approx kl
                       0.00044939807
                      | 0
    clip_fraction
                      | 0.2
| -0.621
    clip_range
entropy_loss
    explained variance | 0.803
    learning_rate | 1e-06
    loss
                       | 137
                       | 11300
    n updates
    policy_gradient_loss | -0.000972
                | 296
    value_loss
 rollout/
                     | 1.27e+03
    ep len mean
    ep rew mean
                       | 2.06e+03
 time/
                       | 120
    fps
                      | 1132
    iterations
    time_elapsed
                     | 4791
| 579584
    total_timesteps
 train/
                       0.0007720542
    approx kl
                      0.00156
    clip_fraction
    clip range
    entropy_loss | -0.593
explained_variance | 0.902
    learning_rate | 1e-06
                      | 11310
    n_updates
    policy_gradient_loss | -0.000661
    value_loss | 97.4
 rollout/
                      1.27e+03
2.07e+03
    ep len mean
    ep rew mean
 time/
   fps
                       | 120
    iterations
                       | 1133
                      i 4796
    time elapsed
    total_timesteps
                      | 580096
 train/
                       0.0019711747
    approx_kl
                      0.00352
    clip fraction
    clip range
                      | 0.2
    entropy loss
                       -0.651
    explained_variance | 0.804
    learning_rate
                       le-06
    loss
                       | 11320
    n_updates
    policy_gradient_loss | 0.00114
    value_loss | 226
| rollout/
```

```
ep len mean
                      | 1.27e+03
   ep_rew_mean
                      | 2.07e+03
time/
                      | 120
  fps
                      | 1134
   iterations
   time_elapsed
                      | 4801
  total timesteps
                     580608
train/
                      | 0.00060299935
  approx kl
   clip_fraction
                     | 0.00137
   clip_range
                     0.2
   entropy_loss
                      | -0.611
   explained variance | 0.224
   learning_rate
                      | 1e-06
                      | 480
   loss
                      | 11330
   n_updates
   policy_gradient_loss | -0.00169
   value_loss | 1.19e+03
rollout/
                     | 1.27e+03
   ep_len_mean
  ep_rew_mean
                    | 2.06e+03
time/
                      | 120
                     | 1135
  iterations
                    | 4805
   time_elapsed
  total_timesteps
                     | 581120
train/
                     | 0.00062507973
  approx_kl
                     | 0
| 0.2
   clip fraction
  clip_range
  entropy_loss
                     | -0.637
   explained_variance | 0.75
   learning_rate | 1e-06
   loss
                      | 70
   n updates
                     11340
   policy_gradient_loss | 0.00164
   value_loss
             | 293
rollout/
                   | 1.27e+03
| 2.06e+03
   ep len mean
  ep_rew_mean
time/
  fps
                      120
  iterations
                      | 1136
   time elapsed
                    581632
  total_timesteps
train/
                      | 0.0047553405
  approx_kl
                     0.0559
   clip_fraction
   clip_range
                     | 0.2
  entropy_loss | -0.545
explained_variance | 0.267
   learning_rate
                      | 1e-06
                      | 328
  loss
   n updates
                      | 11350
   policy_gradient_loss | -0.00784
   value loss
rollout/
  ep_len_mean
                     1.27e+03
                     | 2.06e+03
  ep_rew_mean
time/
                      | 120
  fps
  iterations
                      | 1137
                     | 4813
   time_elapsed
   total_timesteps
                     | 582144
train/
   approx kl
                     0.0049902936
                    | 0.0254
   clip_fraction
   clip range
                     0.2
                      | -0.676
   entropy_loss
   explained variance | 0.857
                      | 1e-06
   learning_rate
                      | 86.5
   loss
   n updates
                      | 11360
   policy_gradient_loss | -0.00363
                      | 185
   value_loss
```

```
rollout/
                        1.26e+03
  ep len mean
  ep rew mean
                      2.07e+03
time/
                      1 120
  fps
                      | 1138
  iterations
  time elapsed
                        4818
  total_timesteps
                      | 582656
                      0.0005363958
  approx_kl
  clip_fraction
                      0.000391
  clip_range
                      0.2
  entropy loss
                      | -0.677
  explained variance | 0.685
  learning rate
                      l 1e-06
  loss
                      | 555
  n updates
                      11370
  policy_gradient_loss | -0.0011
  value loss | 619
rollout/
  ep len mean
                      | 1.26e+03
  ep_rew_mean
                      | 2.07e+03
time/
                      | 120
  fps
  iterations
                      | 1139
                      | 4822
  time_elapsed
  total_timesteps
                      | 583168
train/
                      0.0012802652
  approx_kl
                     0.000391
  clip_fraction
  clip_range
                     0.2
                      -0.765
  entropy_loss
  explained variance | 0.515
                      l 1e-06
  learning_rate
  loss
                      | 665
                     | 11380
  n updates
  policy_gradient_loss | 0.000287
  value loss
                      | 1.23e+03
rollout/
                      1.25e+03
  ep len mean
  ep rew mean
                      | 2.06e+03
time/
                      | 120
  fps
                      | 1140
  iterations
  time elapsed
                    | 4826
  total_timesteps
                      | 583680
train/
  approx kl
                      0.0010629796
                      0 00605
  clip_fraction
  clip_range
                      0.2
  entropy_loss
                      | -0.628
  explained variance | 0.649
                      | 1e-06
  learning_rate
  loss
                      | 83.7
  n_updates
                      | 11390
  policy_gradient_loss | 0.000686
  value_loss
                      | 1.25e+03
  ep_len_mean
  ep_rew_mean
                      2.06e+03
time/
  fps
                      | 120
                       1141
  iterations
  time elapsed
                        4830
                      584192
  total_timesteps
                      | 0.0017215816
  approx_kl
  clip fraction
  clip range
                      0.2
  entropy loss
                      -0.807
  explained_variance
                      0.797
  learning_rate
                       1e-06
                      | 287
  n updates
                      | 11400
  policy_gradient_loss | -0.00146
  value loss
                      | 594
```

```
rollout/
   ep len mean
                       1.26e+03
                      2.07e+03
   ep_rew_mean
time/
  fps
                      120
   iterations
                       1142
   time_elapsed
                      4834
  total_timesteps
                      584704
train/
                      0.0020135487
  approx_kl
   clip_fraction
                      0.0104
  clip range
                      0.2
   entropy_loss
                      -0.634
   explained_variance
                      0.812
  learning_rate
                      l 1e-06
  loss
                      102
  n updates
                      | 11410
   policy_gradient_loss | 0.000792
                     | 185
  value_loss
rollout/
   ep_len_mean
                       1.26e+03
   ep_rew_mean
                      | 2.07e+03
time/
                      120
  fps
                      | 1143
  iterations
  time_elapsed
                     4839
  total_timesteps
                     585216
  approx_kl
                      0.002355861
   clip fraction
                      0.043
   clip_range
                      0.2
   entropy_loss
                      | -0.589
   explained_variance | 0.429
  learning_rate
                      l 1e-06
                      209
   loss
   n_updates
                      | 11420
   policy_gradient_loss | -0.00262
   value_loss
                      | 824
```

rollout/	
ep_len_mean	1.25e+03
ep_rew_mean	2.07e+03
time/	
fps	120
iterations	1144
time_elapsed	4843
total_timesteps	585728
train/	
approx_kl	0.0041394914
clip_fraction	0.026
clip_range	0.2
entropy_loss	-0.593
<pre> explained_variance </pre>	0.889
learning_rate	1e-06
loss	64
n_updates	11430
<pre>policy_gradient_loss </pre>	-0.00451
value_loss	118

1 1
1.25e+03
2.07e+03
120
1145
4847
586240
0.0006826436
0.000391
0.2
-0.632
0.256
1e-06
644
11440
0.000272
1.08e+03

rollout/ ep_len_mean | 1.24e+03 2.06e+03 ep_rew_mean time/ 120 fps iterations | 1146 time elapsed 4851 total_timesteps | 586752 train/ 0.00090643275 approx_kl clip_fraction 0.000586 | 0.2 clip_range entropy_loss entropy_loss | -0.615 explained_variance | 0.691 learning_rate l 1e-06 | 77.7 loss n updates | 11450 policy_gradient_loss | -0.00115 value_loss | 223 ep_len_mean ep_rew_mean | 1.24e+03 | 1.24e+03 | 2.06e+03 time/ | 120 fps iterations | 1147 | 4855 | 587264 time_elapsed total timesteps train/ 0.004666265 approx kl

| 0.0883 | 0.2 | -0.711 clip_fraction clip_range entropy_loss explained variance | 0.561 learning_rate | 1e-06 loss | 262 i 11460 n_updates policy_gradient_loss | -0.0069 value_loss | 778

rollout/ 1.24e+03 ep len mean ep_rew_mean | 2.05e+03 time/ | 120 fps 1148 iterations | 4860 time_elapsed total_timesteps | 587776 0.0049766335 0.0227 0.2 approx kl clip_fraction clip_range entropy_loss | -0.753 explained_variance | 0.817 learning_rate | 1e-06 | 84.6 | 11470 loss n_updates policy_gradient_loss | -0.00147 value_loss | 232

ı	rollout/	1 1
i	ep len mean	1.24e+03
İ	ep_rew_mean	2.05e+03
ĺ	time/	į į
	fps	120
	iterations	1149
	time_elapsed	4864
	total_timesteps	588288
	train/	
	approx_kl	0.0030190255
	clip_fraction	0.00273
	clip_range	0.2
	entropy_loss	-0.848
	<pre>explained_variance</pre>	0.858
	learning_rate	1e-06
	loss	160
	n_updates	11480
	<pre>policy_gradient_loss</pre>	-0.0019

value_loss	320
rollout/	
ep len mean	I 1.24e+03 I
ep rew mean	2.05e+03
time/	j j
fps	120
iterations	1150
time_elapsed	4868
<pre> total_timesteps train/</pre>	588800
approx kl	
clip fraction	1 0.0602
clip range	0.2
entropy_loss	-0.818
explained_variance	0.877
learning_rate	1e-06
loss n updates	80 11490
• = •	-0.00751
value loss	185
rollout/	
ep_len_mean	1.24e+03
ep_rew_mean time/	2.05e+03
fps	
iterations	1151
time_elapsed	4872
<pre> total_timesteps</pre>	589312
train/	
approx_kl	0.0059995498
<pre> clip_fraction clip range</pre>	0.0205 0.2
entropy loss	0.2
explained variance	0.861
learning_rate	l 1e-06
loss	75
n_updates	11500
, , , , , , ,	-0.00347
value_loss	169
rollout/	
ep_len_mean	1.24e+03
ep_rew_mean	2.05e+03
time/	
fps iterations	120 1152
time elapsed	1152
total timesteps	589824
train/	ı i
approx_kl	0.0015132918
clip_fraction	0.00625
<pre> clip_range entropy_loss</pre>	0.2 -0.83
entropy_toss explained variance	0.534
learning rate	l 1e-06
loss	253
n_updates	11510
	0.00238
value_loss	511
rollout/	
ep_len_mean	
ep_rew_mean	2.05e+03
time/	ı İ
fps	120
iterations	1153
<pre> time_elapsed total timesteps</pre>	4883 590336
train/	 1
1 2 2	ı I

86.2

11520

0.008686526 0.0557 0.2 | -1.29 0.828 1e-06

loss

n_updates

anny
approx_kl
clip_fraction
clip_range
entropy_loss
explained_variance
learning_rate

policy_gradient_loss value_loss	-0.0058 421
rollout/	l I
ep len mean	1.24e+03
ep rew mean	2.05e+03
time/	i i
fps	120
iterations	1154
time_elapsed	4887
total_timesteps	590848
train/	
approx_kl	0.0033525373
clip_fraction	0
<pre> clip_range entropy_loss</pre>	0.2 -1.74
explained variance	-7.57
learning rate	l 1e-06
l loss	0.851
n updates	11530
· · · · · · · · · · · · · · · · · · ·	-0.00347
value_loss	5.34
rollout/	
ep_len_mean	1.24e+03
ep_rew_mean	2.05e+03
time/	
fps	120
iterations	1155
<pre> time_elapsed total timesteps</pre>	4891 591360
totat_timesteps train/	
approx kl	 0.0030231783
clip fraction	0.0050251705 0
clip range	0.2
entropy loss	-1.74
explained variance	-3.39
learning_rate	le-06
loss	0.45
n_updates	11540
<pre>policy_gradient_loss </pre>	-0.00296
value_loss	1.49
L ==11==+/	
rollout/ ep len mean	
ep_ten_mean	1.24e+03
time/	2.03e+03
fps	120
iterations	1156
time elapsed	4895
total timesteps	591872
train/	i i
approx_kl	0.006372813
clip_fraction	0.0219
clip_range	0.2
entropy_loss	-1.63
explained_variance	0.337
learning_rate	1e-06
loss	128
n_updates	11550
1 , , , , , , ,	0.00196
value_loss	368
rollout/	
ep_len_mean	
ep_ten_mean	1.26e+03 2.1e+03
time/	
fps	120
iterations	1157
time_elapsed	4899
total_timesteps	592384
train/	i i

0.2 -1.53 0.112 1e-06

139

0.0050842036 | 0.0187 |

loss

ann/
approx_kl
clip_fraction
clip_range
entropy_loss
explained_variance
learning_rate

n updates	11560
policy_gradient_loss	
value_loss	386
rollout/	
ep_len_mean	1.28e+03
ep_rew_mean time/	2.1e+03
fps	120
iterations	1158
<pre> time_elapsed total timesteps</pre>	4904 592896
train/	392090
approx_kl	0.0028198946
<pre> clip_fraction clip range</pre>	0 0.2
entropy_loss	-1.35
explained_variance	0.961
·	1e-06
loss n updates	86.1 11570
policy_gradient_loss	
value_loss	315
rollout/	
ep_len_mean	1.28e+03
ep_rew_mean time/	2.1e+03
fps	120
iterations	1159
time_elapsed	4908
<pre> total_timesteps train/</pre>	593408
approx_kl	0.0022243387
clip_fraction	0.0283
clip_range entropy_loss	0.2 -0.623
	0.799
learning_rate	le-06
loss	51.4 11580
<pre> n_updates policy_gradient_loss </pre>	-0.000744
value_loss	234
rollout/	
ep_len_mean	1.28e+03
ep_rew_mean time/	2.09e+03
fps	120
iterations	1160
<pre> time_elapsed total timesteps</pre>	4912 593920
train/	333320
approx_kl	0.0005352221
clip_fraction	0 0.2
<pre> clip_range entropy loss</pre>	-0.554
explained_variance	0.867
learning_rate	1e-06
loss n updates	72.9 11590
policy_gradient_loss	-0.000555
value_loss	209
rollout/	
ep_len_mean	1.28e+03
ep_rew_mean time/	2.09e+03
fps	120
iterations	1161
<pre> time_elapsed total timesteps</pre>	4916 594432
train/	
approx_kl	0.0025107744
clip_fraction	0.0113 0.2
clip_range entropy_loss	-0.545
<pre> explained_variance </pre>	0.368
learning_rate	1e-06

loss n_updates policy_gradient_loss value_loss	207 11600 -0.00173 1.02e+03
rollout/	1
ep len mean	1.27e+03
ep rew mean	2.09e+03
time/	i i
fps	120
iterations	1162
time_elapsed	4921
<pre> total_timesteps</pre>	594944
train/	
approx_kl	0.0014176976
clip_fraction	0.00137
clip_range	0.2
entropy_loss	-0.617
explained_variance	0.86
learning_rate	1e-06
loss	56.5 11610
<pre> n_updates policy_gradient_loss</pre>	11010 6.03e-05
value_loss	143
vacac_coss	
rollout/	
ep_len_mean	1.27e+03
ep_rew_mean	2.09e+03
time/	İ
fps	120
iterations	1163
time_elapsed	4925
<pre> total_timesteps</pre>	595456
train/	
approx_kl	0.0007001044
clip_fraction	0.000781
clip_range	0.2
<pre> entropy_loss explained variance</pre>	-0.63 0.471
learning rate	0.471 1e-06
loss	199
n updates	11620
policy_gradient_loss	-0.000945
value_loss	852
rollout/	
ep_len_mean	1.27e+03
ep_rew_mean	2.09e+03
time/	
fps iterations	120 1164
time_elapsed	4929
total timesteps	595968
train/	
approx kl	0.0013923254
clip_fraction	0.0013323231
clip_range	0.2
entropy_loss	-0.606
<pre> explained_variance</pre>	0.87
learning_rate	1e-06
loss	91.6
n_updates	11630
1 1 1 2	-0.00283
value_loss	213
rollout/	l I
ep len mean	1.27e+03
ep rew mean	2.09e+03
time/	·
fps	120
iterations	1165
<pre> time_elapsed</pre>	4933
total_timesteps	596480
train/	
approx_kl	0.00092564384
clip_fraction	0.00156
clip_range	0.2
entropy_loss	-0.67
<pre> explained variance</pre>	
' -	0.815

loss n_updates policy_gradient_loss	1e-06 91.7 11640 0.000782 262
rollout/ ep_len_mean ep_rew_mean	1.27e+03 2.09e+03
time/	
fps iterations time_elapsed total timesteps	120 1166 4937 596992
train/	
approx_kl clip_fraction clip range	0.0017660193 0.0043 0.2
	-0.627
	0.353
learning_rate	l 1e-06
loss n updates	288 11650
policy_gradient_loss	
	884
rollout/	 1.27e+03
ep_len_mean ep rew mean	1.27e+03 2.09e+03
time/	2.036.03
fps	120
iterations	1167
time_elapsed	4942
total_timesteps train/	597504
approx kl	0.0042784745
clip fraction	0.00781
clip_range	0.2
' ''= '	-0.715
explained_variance	0.635 1e-06
learning_rate loss	218
n updates	11660
policy_gradient_loss	-0.000991
value_loss	462
rollout/	
ep_len_mean	1.27e+03
ep_rew_mean	2.09e+03
time/	
fps iterations	120 1168
	4946
total_timesteps	598016
train/	
approx_kl	0.004736755 0.0287
<pre> clip_fraction clip range</pre>	0.0207
• • •	-0.71
	0.776
. 3_	1e-06
	85.5
<pre> n_updates policy_gradient_loss </pre>	11670 -0 00515
	390
rollout/ ep len mean	
ep rew mean	2.08e+03
time/	i
fps	120
iterations	1169
<pre> time_elapsed total timesteps</pre>	4950 598528
train/	
approx_kl	0.002436305
clip_fraction	0
<pre> clip_range entropy loss</pre>	0.2 -0.625
I CITCLODY_COSS	0.025

```
explained variance
                     0.88
                      | 1e-06
   learning_rate
   loss
                       | 62
                      | 11680
   n_updates
   policy_gradient_loss | -0.00219
   value loss
                      | 160
                        1.27e+03
   ep_len_mean
  ep_rew_mean
                       | 2.08e+03
time/
  fps
                       | 120
   iterations
                        1170
   time elapsed
                      4955
  total timesteps
                      599040
                      | 0.0015179344
  approx_kl
   clip fraction
                      0.00469
   clip_range
                      0.2
                       | -0.652
   entropy_loss
   explained_variance | 0.67
                        1e-06
   learning_rate
                       | 522
   n updates
                      | 11690
   policy_gradient_loss | -0.00315
   value loss | 660
rollout/
   ep len mean
                        1.27e+03
                      | 2.07e+03
  ep_rew_mean
                       | 120
  fps
   iterations
                      | 1171
                      | 4959
   time_elapsed
  total_timesteps
                      | 599552
train/
                      0.0044802492
   approx_kl
   clip_fraction
                      0.0236
   clip_range
                      0.2
   entropy_loss
                      | -0.655
   explained_variance | 0.875
                      l 1e-06
   learning_rate
                       | 61.5
                       | 11700
   n updates
   policy_gradient_loss | -0.00564
   value loss
                      | 159
                       | 1.27e+03
  ep_len_mean
   ep_rew_mean
                      | 2.07e+03
time/
                       | 120
  fps
                      1172
  iterations
   time_elapsed
                     | 4965
  total_timesteps
                      | 600064
train/
                      0.0017132476
  approx kl
                      | 0
   clip_fraction
   clip range
                      0.2
   entropy_loss
                      | -0.73
   explained variance | 0.657
                       | 1e-06
   learning_rate
   loss
                       | 710
                       | 11710
   n_updates
   policy_gradient_loss | -0.000182
   value_loss
                      | 1.26e+03
   ep len mean
                      2.06e+03
  ep rew mean
time/
                      | 120
  fps
                      | 1173
   iterations
                      | 4969
   time elapsed
   total_timesteps
                       | 600576
                       | 0.0005037063
   approx_kl
   clip fraction
                       | 0
   clip_range
                       0.2
```

	-0.63
• • • =	0.859
learning_rate	1e-06
loss	100 11720
<pre> n_updates policy_gradient_loss</pre>	
	214
rollout/	
ep_len_mean	1.25e+03
ep_rew_mean	2.04e+03
time/	
fps iterations	120 1174
time elapsed	11/4
total timesteps	601088
train/	
approx kl	0.001101943
clip_fraction	0.00547
clip_range	0.2
entropy_loss	-0.572
• • •	0.561
learning_rate	1e-06
loss	283
	11730
policy_gradient_loss	
• =	617
ep_len_mean	1.25e+03
ep_rew_mean	2.04e+03
time/	
fps iterations	120 1175
time elapsed	4978
total_timesteps	601600
train/	j j
approx_kl	0.00022223464
<pre> clip_fraction</pre>	0
clip_range	0.2
	-0.599
explained_variance	0.685
<pre> learning_rate loss</pre>	1e-06 333
n updates	11740
policy_gradient_loss	
value_loss	727
rollout/	
ep_len_mean	
ep_rew_mean	2.04e+03
time/	i i
fps	120
iterations	1176
time_elapsed	4982
total_timesteps	602112
train/ approx kl	 0.0013149597
clip_fraction	0.0013143337
clip range	0.2
entropy loss	-0.646
explained_variance	0.848
learning_rate	1e-06
loss	85.6
n_updates	11750
policy_gradient_loss	
value_loss	1 214
	214
	214
rollout/	::
ep_len_mean	
ep_len_mean ep_rew_mean	::
ep_len_mean ep_rew_mean time/	1.25e+03
ep_len_mean ep_rew_mean time/ fps	1.25e+03
ep_len_mean ep_rew_mean time/ fps iterations	1.25e+03
ep_len_mean ep_rew_mean time/ fps	1.25e+03
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed	1.25e+03
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps	1.25e+03

```
clip_range
                      0.2
   entropy_loss
                     | -0.673
   explained_variance | 0.893
   learning_rate
                      | 1e-06
                     84.4
   loss
                    | 11760
   n updates
   policy_gradient_loss | -0.0026
   value_loss | 176
rollout/
   ep_len_mean
                       1.25e+03
  ep_rew_mean
                      | 2.05e+03
time/
                      120
  fps
                     | 1178
   iterations
   time elapsed
                    4990
  total timesteps
                    603136
train/
  approx_kl
                      0.0005974951
   clip_fraction
                     0.000977
                    | 0.2
   clip_range
  entropy_loss | -0.624
explained_variance | 0.329
   learning_rate
                     | 748
                      | 11770
   n updates
   policy_gradient_loss | 0.00166
   value loss
rollout/
                      | 1.25e+03
   ep len mean
  ep_rew_mean
                     2.05e+03
time/
                      120
  fps
  iterations
                     | 1179
                    | 4994
| 603648
  time_elapsed
  total_timesteps
                     0.0026300559
  approx_kl
                    | 0.000781
  clip_fraction
   clip_range
                     0.2
                      | -0.648
   entropy_loss
   explained variance | 0.851
   learning_rate | 1e-06
                      | 60.9
   n updates
                      11780
   policy_gradient_loss | -0.00292
   value_loss | 155
  ep_len_mean
                    1.26e+03
2.07e+03
  ep_rew_mean
                     | 120
                    | 1180
  iterations
                    | 4999
   time elapsed
  total_timesteps
                     | 604160
train/
                     0.0004603119
  approx kl
                    0.000391
   clip fraction
   clip_range
                     | -0.523
   entropy_loss
   explained_variance | 0.746
                      | 1e-06
   learning_rate
   loss
                      | 11790
   n_updates
   policy_gradient_loss | 0.000306
   value_loss
                      | 155
rollout/
                      | 1.26e+03
  ep len mean
  ep_rew_mean
                     2.07e+03
time/
                      | 120
                      | 1181
  iterations
   time elapsed
  total_timesteps
                      | 604672
train/
                      0.00054679636
  approx_kl
```

```
clip_fraction
                      | 0.00215
   clip_range
                      0.2
                      | -0.58
   entropy_loss
   explained_variance | 0.357
   learning_rate
                      | 1e-06
                      | 356
                      | 11800
   n updates
   policy_gradient_loss | 0.000711
   value loss | 790
rollout/
  ep len mean
                        1.26e+03
                      | 2.07e+03
  ep_rew_mean
time/
                      | 120
  fps
  iterations
                      | 1182
                     | 5007
   time elapsed
   total timesteps
                      605184
train/
                      | 0.0013350154
  approx kl
   clip_fraction
                      0.00449
  clip_range
entropy_loss
                      0.2
                      | -0.579
   explained variance | 0.911
                     | 1e-06
   learning_rate
   loss
                      | 11810
   n_updates
   policy_gradient_loss | -0.000416
   value_loss
              | 102
  ep_len_mean
                      | 1.26e+03
  ep_rew_mean
                      | 2.07e+03
time/
  fps
                      | 120
                        1183
  iterations
   time_elapsed
                      | 5011
  total_timesteps
                      | 605696
                      | 0.0005642938
  approx_kl
   clip_fraction
                      | 0.00137
                      0.2
   clip_range
   entropy loss
                      | -0.624
   explained_variance | 0.914
   learning_rate
                      | 1e-06
   loss
                       43.7
   n_updates
                     | 11820
   policy_gradient_loss | -0.000379
   value_loss
                    | 111
rollout/
                      | 1.26e+03
  ep_len_mean
  ep rew mean
                      | 2.07e+03
time/
  fps
                      | 120
   iterations
                      | 1184
   time elapsed
                      | 5016
                      | 606208
  total_timesteps
train/
                      0.00027094595
   approx_kl
   clip fraction
   clip_range
                      0.2
                      -0.602
   entropy_loss
   explained_variance
                     0.502
   learning_rate
                       | 1e-06
   loss
                        336
                        11830
   n updates
   policy_gradient_loss | -0.000685
rollout/
  ep len mean
                      1.26e+03
                      2.06e+03
  ep_rew_mean
time/
                      | 120
   iterations
                      | 1185
                      | 5020
   time_elapsed
   total_timesteps
                       | 606720
train/
```

```
approx_kl
                      0.0014406802
   clip_fraction
                      0.00918
  clip_range
entropy_loss
                     0.2
                      | -0.605
   explained variance | 0.274
   learning_rate
                     | 1e-06
   loss
                      | 104
              | 11840
   n updates
   policy_gradient_loss | -0.00235
   value_loss | 286
rollout/
  ep_len_mean
                     | 1.26e+03
                      2.06e+03
  ep rew mean
time/
                      120
                     | 1186
  iterations
  time_elapsed
                     | 5024
  total_timesteps
                      | 607232
train/
                     0.0011060188
  approx_kl
                     0.000391
   clip_fraction
  clip_range
entropy_loss
                     | -0.683
   explained_variance | 0.773
   learning_rate | 1e-06
                      | 154
   loss
   n_updates
                      | 11850
   policy_gradient_loss | 0.00171
rollout/
  ep len mean
                      | 1.26e+03
  ep_rew_mean
                      | 2.06e+03
time/
                      | 120
  fps
                    | 1187
| 5028
| 607744
   iterations
  time_elapsed
  total_timesteps
train/
  approx kl
                      0.0035027894
  clip_fraction
                      0.017
  clip_range
                     | 0.2
  entropy_loss | -0.577
explained_variance | 0.88
   learning_rate
                      l 1e-06
                      | 65.2
                      | 11860
   n updates
   policy_gradient_loss | -0.00432
   value_loss | 189
rollout/
  ep len mean
                     | 1.26e+03
                    2.07e+03
  ep_rew_mean
time/
                      | 120
  fps
                      | 1188
  iterations
  time_elapsed
                    | 5032
| 608256
  total timesteps
train/
  approx kl
                      0.0014260245
                     | 0.000195
   clip_fraction
                     | 0.2
   clip_range
                      | -0.513
   entropy_loss
   explained variance | 0.85
   learning_rate
                     | 1e-06
   loss
   n_updates
                      | 11870
   policy_gradient_loss | -0.000977
   value loss
                      | 217
rollout/
                     | 1.26e+03
  ep_len_mean
  ep_rew_mean
                      | 2.07e+03
time/
                      | 120
                      | 1189
  iterations
   time elapsed
                      | 5037
   total_timesteps
                      | 608768
```

```
train/
                       0.0016522522
   approx kl
   clip fraction
                      0.00547
                      0.2
   clip_range
                      | -0.52
   entropy_loss
   explained_variance | 0.682
   learning_rate
                      | 1e-06
                      | 79.7
                      11880
   n updates
   policy_gradient_loss | -0.00156
   value_loss | 403
rollout/
   ep len mean
                        1.25e+03
                      | 2.06e+03
  ep rew mean
time/
                      | 120
  fps
   iterations
                      | 1190
   time_elapsed
                      | 5041
                      | 609280
  total_timesteps
train/
                      0.0025690356
   approx kl
                      0.0082
   clip_fraction
   clip range
                      0.2
                      | -0.495
   entropy_loss
   explained_variance | 0.799
                      | 1e-06
   learning_rate
                      | 66.8
   loss
                      | 11890
   n_updates
   policy_gradient_loss | -0.0014
   value_loss
                      | 173
rollout/
                       | 1.25e+03
  ep_len_mean
   ep_rew_mean
                     | 2.06e+03
time/
  fps
                      | 120
                      | 1191
  iterations
                     | 5045
   time_elapsed
  total_timesteps
                      | 609792
train/
                      0.00088000286
  approx kl
   clip_fraction
                      0.000977
                      0.2
   clip range
  entropy_loss
                      | -0.595
   explained variance | 0.931
   learning_rate
                      | 1e-06
                       | 68.9
   loss
   n_updates
                       | 11900
   policy_gradient_loss | -0.00104
   value loss
  ep_len_mean
                     | 1.25e+03
  ep_rew_mean
                      | 2.05e+03
time/
  fps
                       | 120
                      | 1192
   iterations
   time elapsed
  total timesteps
                      | 610304
train/
                      | 0.0016035856
   approx_kl
   clip_fraction
                      0.0125
   clip_range
                      0.2
   entropy_loss
                      | -0.454
   explained_variance | 0.886
                      | 1e-06
   learning_rate
   loss
                       | 57.1
   n updates
                      | 11910
   policy_gradient_loss | 0.00069
   value loss
                       | 151
rollout/
   ep len mean
                      | 1.25e+03
  ep_rew_mean
                      | 2.05e+03
time/
                      | 120
  fps
   iterations
                       | 1193
                       | 5054
   time_elapsed
```

```
{\tt total\_timesteps}
                      | 610816
train/
  approx kl
                      0.0013397627
  clip_fraction
                      0.00273
                     0.2
  clip range
                     | -0.435
  entropy_loss
  explained variance | 0.762
                      | 1e-06
  learning_rate
  loss
  n_updates
                     | 11920
  policy_gradient_loss | -0.00231
  value_loss
              | 571
rollout/
                      | 1.25e+03
  ep len mean
  ep_rew_mean
                    2.05e+03
time/
  fps
                      | 120
  iterations
                      | 1194
  time elapsed
                    | 5059
  total_timesteps
                     | 611328
train/
                     | 0.00043483172
  approx_kl
                    0.000391
  clip fraction
  clip_range
                    | 0.2
  entropy_loss
                     | -0.526
  explained_variance | 0.84
  learning_rate
                     le-06
                      | 93.4
  loss
                      | 11930
  n_updates
  policy_gradient_loss | 0.00144
  value loss
rollout/
  ep len mean
                     | 1.26e+03
                     | 2.06e+03
  ep_rew_mean
time/
                      | 120
                    | 1195
  iterations
  time_elapsed
                    | 5063
  total timesteps
                      | 611840
train/
                     0.0005244785
  approx kl
                     | 0
  clip fraction
                     0.2
  clip_range
  entropy_loss
                    -0.51
  explained_variance | 0.928
  learning_rate | 1e-06
  loss
                      | 46
  n updates
                      11940
  policy_gradient_loss | 0.000771
  value loss
                      | 169
rollout/
                    | 1.26e+03
  ep len mean
  ep_rew_mean
                      | 2.06e+03
time/
                      | 120
  fps
                     | 1196
  iterations
                     | 5067
  time_elapsed
                    612352
  total timesteps
  approx kl
                      | 0.0019903928
  clip_fraction
                      | 0.016
  clip range
                     0.2
                     | -0.437
  entropy_loss
  explained_variance | 0.652
                      | 1e-06
  learning_rate
                      | 11950
  n_updates
  policy_gradient_loss | -0.00286
  value_loss
rollout/
                      | 1.26e+03
  ep_len_mean
  ep_rew_mean
                      | 2.06e+03
time/
                      | 120
  fps
  iterations
                      | 1197
```

```
time elapsed
                      | 5071
                      | 612864
  total_timesteps
train/
                      0.00066356757
  approx_kl
  clip fraction
                      0.2
  clip_range
                      i -0.569
  entropy loss
  explained_variance | 0.674
                      le-06
  learning_rate
                      | 116
  loss
                      | 11960
  n updates
  policy_gradient_loss | -0.000948
  value loss
rollout/
  ep len mean
                      2.06e+03
  ep rew mean
time/
                      | 120
  fps
  iterations
                      | 1198
  time_elapsed
                     | 5076
  total_timesteps
                     | 613376
train/
  approx kl
                      0.0006288185
  clip_fraction
  clip range
                      0.2
  entropy_loss
                      | -0.672
  explained variance | 0.812
                      | 1e-06
  learning_rate
                      | 124
  n updates
                      11970
  policy gradient loss | -0.00113
  value_loss | 286
                     | 1.26e+03
  ep_len_mean
  ep_rew_mean
                     | 2.06e+03
time/
                      | 120
                     | 1199
  iterations
                    | 5081
  time elapsed
  total_timesteps
                      613888
                      0.003119298
  approx kl
  clip_fraction
                     | 0.0125
  clip range
                      0.2
  entropy_loss
                     | -0.853
  explained_variance | 0.736
  learning_rate
                      | 1e-06
                      | 155
  loss
  n updates
                      | 11980
  policy_gradient_loss | 0.00358
  value_loss
                      | 490
rollout/
                      | 1.26e+03
  ep_len_mean
  ep_rew_mean
                      | 2.06e+03
time/
                      120
  fps
                      | 1200
  iterations
  time elapsed
  total_timesteps
                     | 614400
train/
  approx_kl
                      | 0.0023170097
  clip_fraction
                      0.2
  clip_range
  entropy_loss
                      | -1.64
  explained_variance | 0.455
  learning_rate
                      | 1e-06
                      | 1.85
  loss
                      11990
  n updates
  policy gradient loss | -0.00314
  value loss
                      | 1.26e+03
  ep len mean
                      | 2.06e+03
  ep_rew_mean
time/
                      | 120
  fps
```

iterations	1201
time_elapsed	5089
total_timesteps	614912
train/	
approx_kl	0.015371911
clip_fraction	0.0547 0.2
clip_range entropy_loss	-1.49
explained variance	0.677
learning_rate	l 1e-06
loss	129
n_updates	12000
<pre>policy_gradient_loss </pre>	0.00488
value_loss	470
rollout/	
ep_len_mean	1.26e+03 2.06e+03
ep_rew_mean time/	2.00e+05
fps	
iterations	1202
time elapsed	5093
total timesteps	615424
train/	i i
approx_kl	0.011196807
clip_fraction	0.0266
clip_range	0.2
' ''= '	-1.24
· · · · · · · · · · · · · · · · · · ·	0.577
<pre> learning_rate loss</pre>	1e-06 86.6
n updates	12010
n_upuates policy_gradient_loss	
	256
""""	
rollout/	
ep_len_mean	1.26e+03
ep_rew_mean	2.06e+03
time/	
fps	120
iterations	1203
<pre> time_elapsed total_timesteps</pre>	5098 615936
train/	013930
approx kl	0.001828814
clip_fraction	0.000586
clip_range	0.2
entropy_loss	-1.18
<pre> explained_variance </pre>	0.831
3	le-06
	60.8
	12020
	-0.00175
. –	172
rollout/	l I
ep_len_mean	
ep rew mean	2.09e+03
time/	i i
fps	120
iterations	1204
time_elapsed	5102
total_timesteps	616448
train/	
approx_kl	0.005934592
clip_fraction	0.00566
clip_range entropy_loss	0.2 -1.36
	-1.36
	1e-06
loss	10.7
n updates	12030
policy_gradient_loss	
	53.1
rollout/	
! ' !	1.29e+03
ep_rew_mean time/	2.09e+03
I CTINE/	ı I

```
fps
                      | 120
                      | 1205
   iterations
   time_elapsed
                      5106
                      616960
   total_timesteps
train/
   approx kl
                      | 0.0013047557
                     0.00254
   clip fraction
  clip_range
entropy_loss
                      0.2
                     | -1.14
   explained_variance | 0.945
   learning_rate | 1e-06
                      | 194
   loss
                      | 12040
   n updates
   policy_gradient_loss | -0.00153
   value_loss | 323
rollout/
   ep len mean
                        1.28e+03
  ep_rew_mean
                      | 2.07e+03
time/
                      | 120
  fps
   iterations
                      | 1206
   time elapsed
                     | 5110
                    617472
  total timesteps
train/
                     | 0.0004098392
  approx kl
                     0.000586
   clip_fraction
   clip range
                     0.2
  entropy_loss | -0.26
explained_variance | 0.938
                      l 1e-06
   learning_rate
                      | 28.5
  loss
                      | 12050
   n updates
   policy gradient loss | -0.000586
   value_loss | 106
rollout/
                      | 1.28e+03
  ep_len_mean
  ep_rew_mean
                    | 2.07e+03
time/
                      | 120
                      | 1207
  iterations
                    | 5114
| 617984
  time_elapsed
  total_timesteps
train/
                      0.0007833814
  approx kl
   clip_fraction
                     | 0.00937
   clip_range
                     0.2
   entropy_loss
                      | -0.334
   explained_variance | 0.779
   learning_rate
                     | 1e-06
                      | 442
                      i 12060
   n updates
   policy_gradient_loss | -0.000263
   value_loss | 571
rollout/
                     | 1.28e+03
  ep_len_mean
  ep_rew_mean
                     2.07e+03
time/
                      120
                     | 1208
   iterations
                    | 5119
   time elapsed
   total_timesteps
                      | 618496
train/
                      | 0.00014398887
  approx_kl
                     | 0.000586
   clip fraction
                      0.2
   clip_range
   entropy loss
                     | -0.294
   explained variance | 0.893
   learning rate
                      l 1e-06
   loss
                      | 62.2
   n_updates
                      12070
   policy_gradient_loss | -0.000565
  ep len mean
                     | 1.27e+03
                      | 2.06e+03
   ep_rew_mean
```

```
time/
                        120
   fps
   iterations
                        1209
                        5123
   time_elapsed
                      | 619008
   total_timesteps
train/
                        0.0031749539
   approx kl
   clip_fraction
                      0.0336
   clip range
                      0.2
   entropy_loss
                      | -0.341
   explained_variance | 0.344
                      | 1e-06
   learning_rate
                      | 359
   loss
                      | 12080
   n_updates
   policy_gradient_loss | 0.000567
   value_loss
                      | 1.3e+03
   ep_len_mean
                        1.27e+03
                     | 2.06e+03
  ep_rew_mean
time/
                      | 120
  fps
                      1210
  iterations
   time elapsed
                     | 5127
  total_timesteps
                      619520
train/
                      | 0.0008098772
  approx_kl
   clip fraction
                      0.00156
  clip_range
                      0.2
   entropy loss
                      | -0.501
   explained_variance | 0.904
   learning_rate
                      | 1e-06
   loss
                      1 140
   n updates
                      | 12090
   policy_gradient_loss | 0.000207
   value loss
  ep_len_mean
                      | 1.27e+03
  ep_rew_mean
                      | 2.06e+03
time/
  fps
                      i 120
                      | 1211
  iterations
                      | 5132
   time elapsed
   total_timesteps
                      | 620032
train/
                      0.0005578245
  approx_kl
                     | 0.00137
   clip_fraction
   clip_range
                      0.2
                      | -0.389
   entropy_loss
   explained_variance | 0.916
                      l 1e-06
   learning_rate
                      | 120
   loss
                      12100
   n updates
   policy_gradient_loss | -0.000339
   value loss
                      | 190
rollout/
                      1.28e+03
   ep len mean
   ep rew mean
                      | 2.07e+03
time/
                      | 120
  fps
   iterations
                      | 1212
   time_elapsed
                      | 5137
  total_timesteps
                      | 620544
train/
   approx kl
                      0.0009319555
                      0.00352
   clip_fraction
   clip range
                      0.2
   entropy_loss
                      | -0.466
   explained variance
                      0.782
   learning_rate
                      l 1e-06
                      | 210
                      | 12110
   n updates
   policy gradient loss | -0.000664
  value_loss
rollout/
                      | 1.27e+03
  ep_len_mean
```

```
ep rew mean
                        | 2.05e+03
 time/
                        120
    fps
                        | 1213
    iterations
                       | 5141
    time elapsed
    total_timesteps
                       | 621056
                       | 0.00023344229
    approx kl
    clip fraction
    clip_range
entropy_loss
                      | 0.2
                       | -0.374
    explained_variance | 0.649
    learning_rate
                       | 1e-06
                        | 512
    loss
    n updates
                       12120
    policy gradient loss | -0.000879
    value loss
 rollout/
    ep len mean
                        | 1.27e+03
                       | 2.05e+03
    ep_rew_mean
 time/
                       120
    fps
    iterations
                      | 1214
                    5145
    time_elapsed
    total timesteps
                       | 621568
 train/
                       0.0023369305
    approx kl
                      0.0174
    clip_fraction
    clip_range
entropy_loss
                      0.2
-0.449
    explained variance | 0.573
    learning_rate | 1e-06
    loss
                       | 338
    n_updates
                       12130
    policy_gradient_loss | -0.00375
               | 1.03e+03
    value_loss
 rollout/
                     | 1.26e+03
    ep len mean
    ep rew mean
                       | 2.05e+03
 time/
                       | 120
    fps
                     | 1215
| 5149
| 622080
    iterations
    time_elapsed
    total_timesteps
 train/
                      | 0.0039008989
    approx kl
                       | 0.0258
    clip_fraction
                      0.2
    clip range
    entropy_loss | -0.398
explained_variance | 0.882
    learning_rate | 1e-06
                       47.1
                      | 12140
    n_updates
    policy_gradient_loss | -0.00607
    value_loss | 104
 rollout/
                      1.26e+03
2.05e+03
    ep len mean
    ep rew mean
 time/
   fps
                       | 120
    iterations
                       | 1216
                      | 5153
| 622592
    time elapsed
    total_timesteps
 train/
                       0.0007723385
    approx_kl
                      0.00313
    clip fraction
    clip range
                      | 0.2
    entropy loss
                       | -0.389
    explained_variance | 0.449
    learning_rate
                       le-06
                        | 195
    loss
                       | 12150
    n_updates
    policy_gradient_loss | 0.000515
    value loss | 851
| rollout/
```

```
ep len mean
                       | 1.26e+03
   ep_rew_mean
                       | 2.04e+03
time/
                       | 120
  fps
   iterations
                       | 1217
   time_elapsed
                      | 5158
   total timesteps
                     | 623104
train/
                      | 0.0031521423
   approx kl
                      | 0.0203
   clip_fraction
                      | 0.2
   clip_range
   entropy_loss
                      | -0.512
   explained variance | 0.885
   learning_rate
                     | 1e-06
   loss
                      12160
   n_updates
   policy gradient loss | -0.00296
   value_loss | 106
rollout/
                      | 1.26e+03
   ep_len_mean
   ep_rew_mean
                     | 2.05e+03
time/
                      | 120
  iterations | 1218
time_elapsed | 5162
total_timesteps | 623616
train/
                      0.0025383858
   approx_kl
                     0.00977
0.2
   clip fraction
   clip_range
   entropy_loss
                     | -0.507
   explained_variance | 0.892
   learning_rate | 1e-06
                      i 73.3
   loss
                     12170
   n updates
   policy_gradient_loss | -0.00131
   value_loss | 241
rollout/
                    | 1.26e+03
| 2.05e+03
   ep len mean
  ep_rew_mean
time/
  fps
                       120
   iterations
                      | 1219
                     5166
   time elapsed
                     624128
   total_timesteps
train/
                      | 0.00018620095
   approx_kl
   clip_fraction
                      | 0
   clip_range
                     | 0.2
   entropy_loss | -0.585
explained_variance | 0.872
                      l 1e-06
   learning_rate
   loss
                       | 256
   n updates
                       | 12180
   policy_gradient_loss | -0.000234
                  | 439
   value loss
rollout/
   ep_len_mean
                     | 1.25e+03
                     | 2.04e+03
   ep_rew_mean
time/
                       | 120
  fps
   iterations
                      | 1220
   time_elapsed
                     | 5170
   total_timesteps
                      | 624640
train/
   approx kl
                      0.0032654086
                     | 0.0104
   clip_fraction
   clip range
                     0.2
                      | -0.562
   entropy_loss
   explained variance | 0.944
                      | 1e-06
   learning_rate
                       | 50.5
   loss
   n updates
                      | 12190
   policy_gradient_loss | -0.00261
                       | 117
   value_loss
```

```
rollout/
                        | 1.25e+03
   ep len mean
  ep_rew_mean
                        | 2.03e+03
time/
  fps
                        | 120
                        | 1221
   iterations
                      | 5174
| 625152
   time elapsed
   total_timesteps
                       | 0.00045761303
   approx_kl
                      0.000195
   clip_fraction
   clip_range
                      | -0.296
   entropy loss
   explained variance | 0.909
   learning_rate | 1e-06
                        1 55.4
   loss
   n updates
                       12200
   policy_gradient_loss | -0.00158
   value_loss | 127
rollout/
  ep_len_mean
ep_rew_mean
                      1.24e+03
2.02e+03
time/
                       | 120
  fps
                      | 1222
| 5179
| 625664
   iterations
   time_elapsed
  total_timesteps
train/
                      0.00013691641
0
0.2
   approx_kl
  clip_fraction
clip_range
entropy_loss
   entropy_loss | -0.348
explained_variance | 0.666
                       l 1e-06
   learning_rate
   loss
                       | 844
               | 12210
   n updates
   policy_gradient_loss | -0.000302
   value_loss | 701
rollout/
  ep_len_mean
ep_rew_mean
                       | 1.24e+03
                     2.02e+03
time/
                       120
  fps
                      1223
   iterations
                    | 5183
| 626176
   time_elapsed
  total timesteps
train/
                       0.00096355705
  approx kl
                      | 0.00547
   clip_fraction
  clip_range | 0.2
entropy_loss | -0.336
explained_variance | 0.698
                      | 1e-06
   learning_rate
   loss
                      | 305
                        | 12220
   n_updates
   policy_gradient_loss | -0.00141
                       | 588
   value_loss
                     | 1.23e+03
   ep_len_mean
                       | 2.01e+03
   ep_rew_mean
time/
                       | 1224
   iterations
                      5187
626688
   time elapsed
  total_timesteps
                       | 0.0010025438
   approx_kl
                      0.000391
   clip fraction
   clip_range
   entropy loss
                       | -0.431
   explained_variance | 0.9
   learning_rate
                        | 1e-06
                        1 56.4
                        | 12230
   n_updates
   policy_gradient_loss | -0.0015
   value loss | 154
```

```
rollout/
                        1.23e+03
  ep len mean
   ep_rew_mean
                      | 2e+03
time/
                      | 120
  fps
                        1225
   iterations
   time elapsed
                      | 5191
  total_timesteps
                     | 627200
train/
  approx kl
                      | 0.0033136583
   clip_fraction
                      0.00234
                      0.2
  clip range
   entropy_loss
                      | -0.515
   explained variance | 0.872
  learning_rate
                      l 1e-06
                      | 178
                      | 12240
   n_updates
   policy_gradient_loss | -0.00319
   value_loss | 521
rollout/
                        1.23e+03
   ep_len_mean
  ep_rew_mean
time/
                      | 120
                      | 1226
  iterations
  time elapsed
                     | 5196
                     | 627712
  total_timesteps
                      0.0018252535
  approx kl
                      | 0.0164
   clip fraction
   clip_range
                      0.2
   entropy loss
                      | -0.444
   explained_variance | 0.769
   learning_rate
                      | 1e-06
  loss
                      | 134
   n_updates
                      | 12250
   policy_gradient_loss | -0.00498
                      | 462
   value_loss
rollout/
  ep len mean
                      | 1.23e+03
  ep rew mean
                      2e+03
time/
  fps
                      120
                      | 1227
  iterations
                    | 5200
   time elapsed
   total_timesteps
                      | 628224
train/
                      | 0.0023196535
  approx_kl
   clip fraction
                      | 0.0148
  clip_range
entropy_loss
                      0.2
                      -0.452
   explained_variance | 0.623
   learning_rate
                      | 1e-06
                      | 109
   loss
   n updates
                      | 12260
   policy_gradient_loss | 0.000274
   value loss
                      | 347
                     | 1.24e+03
  ep_len_mean
                      | 2.02e+03
  ep_rew_mean
time/
                      | 120
  fps
   iterations
                        1228
   time_elapsed
                      | 5204
   total_timesteps
                      | 628736
train/
  approx kl
                      0.0025867263
   clip fraction
                      | 0.0193
   clip range
                      0.2
                      | -0.546
   entropy_loss
   explained variance
                      0.906
   learning_rate
                      | 1e-06
   loss
   n_updates
                      | 12270
   policy_gradient_loss | -0.00241
                      | 149
   value_loss
```

rollout/ ep_len_mean | 1.24e+03 ep_rew_mean | 2.02e+03 time/ fps | 120 | 1229 iterations time elapsed 5208 total_timesteps | 629248 train/ | 0.00072797725 approx_kl clip_fraction 0.00176 | 0.2 clip_range
entropy_loss entropy_loss | -0.468 explained_variance | 0.643 l 1e-06 learning rate | 416 loss n updates | 12280 policy_gradient_loss | -0.000835 value_loss | 599 ep_len_mean ep_rew_mean | 1.24e+03 2.02e+03 time/ | 120 fps iterations 1230 time_elapsed | 5212 | 629760 total timesteps train/ 0.0018065001 approx_kl | 0.000391 clip_fraction | 0.2 clip_range entropy_loss -0.601 explained variance | 0.858 learning_rate | 1e-06 loss 99.8 n_updates 12290 policy_gradient_loss | -0.0019 value_loss | 261 ep_len_mean | 1.24e+03 ep_rew_mean | 2.02e+03 time/ | 120 fps | 1231 iterations time_elapsed | 5218 | 630272 total_timesteps 0.0004600084 0.000977 0.2 approx kl clip_fraction clip range entropy_loss | -0.585 explained_variance | 0.727 learning_rate | 1e-06 loss | 414 | 12300 n_updates policy gradient loss | 7.53e-05 value loss rollout/ | 1.24e+03 ep_len_mean ep_rew_mean | 2.03e+03 time/ | 120 iterations | 1232 time elapsed | 5222 total_timesteps | 630784 train/

approx kl

n updates

loss

clip fraction

learning_rate

explained_variance | 0.898

policy_gradient_loss | -0.00303

clip_range
entropy_loss

0.0029182476

0.00449

| 0.2 | -0.517

| 1e-06

| 12310

| 151

value_loss	272
rollout/	
ep_len_mean	1.24e+03
ep_rew_mean	2.03e+03
time/	
fps	120
iterations	1233
time_elapsed	5226
total_timesteps	631296
train/	
approx_kl	0.00095047604
clip_fraction	0.00254
clip_range	0.2
entropy_loss	-0.393
explained_variance	0.397
learning_rate	1e-06 714
l loss	714 12320
<pre> n_updates policy_gradient_loss </pre>	12320 -0.00132
value loss	-0.00132
vacue_coss	043
rollout/	
ep len mean	
ep rew mean	2.03e+03
time/	
l fps	120
iterations	1234
time elapsed	5230
total timesteps	631808
train/	
approx kl	0.0012398629
clip_fraction	0.0084
clip range	0.2
entropy loss	-0.51
explained variance	0.915
learning_rate	le-06
loss	49
n updates	12330
policy_gradient_loss	0.000549
value loss	214
·	
rollout/	
ep_len_mean	1.24e+03
ep_rew_mean	2.03e+03
time/	
fps	120
iterations	1235
time_elapsed	5234
total_timesteps	632320
train/	
approx_kl	0.0010190463
clip_fraction	0.00254
clip_range	0.2
entropy_loss	-0.471
explained_variance	0.776
learning_rate	1e-06
loss	318
n_updates	12340
' ',_3 _ '	-0.00207
value_loss	568
rollout/	
ep_len_mean	1.25e+03
<pre> ep_rew_mean time/</pre>	2.04c+03
fps iterations	120 1236
	1236
<pre> time_elapsed total timesteps </pre>	'
total_timesteps train/	632832
approx kl	
1 abb. av_v.	0.00007002

ann/
approx_kl
clip_fraction
clip_range
entropy_loss
explained_variance
learning_rate

loss

n_updates

| 0

| 0.2 | -0.508 | 0.879

1e-06

62

12350

policy_gradient_loss value_loss	-0.000669 155
rollout/	l I
ep_len_mean	1.25e+03
ep_rew_mean time/	2.04e+03
fps	120
iterations	1237
time_elapsed	5243
total_timesteps train/	633344
approx kl	0.0027835271
clip_fraction	0.00684
clip_range	0.2
<pre> entropy_loss explained variance</pre>	-0.589 0.964
	1e-06
loss	42
	12360
! ' _ ' _ ' _ !	-0.00101 134
vacac_coss	
rollout/	
<pre> ep_len_mean ep rew mean</pre>	1.25e+03 2.04e+03
time/	2.040105
fps	120
iterations	1238
<pre> time_elapsed total timesteps</pre>	5247 633856
train/	
approx_kl	0.002039303
clip_fraction	0.0199
<pre> clip_range entropy_loss</pre>	0.2 -0.415
explained_variance	0.77
learning_rate	1e-06
l loss	48.9 12370
<pre> n_updates policy_gradient_loss </pre>	-0.0028
value_loss	267
rollout/	
ep_len_mean	1.25e+03
ep_rew_mean	2.04e+03
time/ fps	
iterations	1239
time_elapsed	5251
<pre> total_timesteps train/</pre>	634368
approx_kl	 0.0011357787
clip_fraction	0.00508
clip_range	0.2
<pre> entropy_loss explained variance</pre>	-0.373 0.423
	1e-06
loss	342
n_updates	12380
<pre>policy_gradient_loss value_loss</pre>	-3.67e-05 951
1	· I
rollout/ ep len mean	 1.24e+03
ep_rew_mean	2.03e+03
time/	
fps iterations	120 1240
iterations time elapsed	1240 5256
total_timesteps	634880
train/	
approx_kl clip_fraction	0.0010535992 0.00508
clip_rraction clip_range	0.00508
entropy_loss	-0.386
explained_variance	0.867
learning_rate loss	1e-06 33.8
,	1

n_updates policy_gradient_loss	12390 -0.00208
value_loss	109
rollout/	
ep_len_mean ep rew mean	1.24e+03 2.03e+03
time/	
fps	120
<pre> iterations time elapsed </pre>	1241 5260
total_timesteps	635392
train/	0.00040040056
approx_kl clip_fraction	0.00049949856 0.0109
clip_range	0.2
entropy_loss	-0.448 0.771
<pre> explained_variance learning rate </pre>	l 1e-06
loss	347
n_updates	12400 0.00138
<pre>policy_gradient_loss value loss</pre>	815
rollout/	
ep_len_mean	1.24e+03
ep_rew_mean	2.03e+03
time/ fps	
iterations	1242
time_elapsed	5264
<pre> total_timesteps train/ </pre>	635904
approx_kl	0.0015658322
clip_fraction	0.0164
clip_range entropy_loss	0.2 -0.516
<pre> explained_variance </pre>	0.907
learning_rate loss	1e-06 66.2
n updates	12410
policy_gradient_loss	-0.00135
value_loss	157
rollout/	1 240.02
ep_len_mean ep rew mean	1.24e+03 2.03e+03
time/	i
fps iterations	120 1243
time elapsed	5268
total_timesteps	636416
train/ approx kl	
clip_fraction	0
clip_range	0.2
<pre> entropy_loss explained variance </pre>	-0.462 0.894
learning_rate	1e-06
loss	71.3 12420
<pre> n_updates policy_gradient_loss </pre>	-0.000622
value_loss	:
rollout/	
ep_len_mean	1.24e+03
ep_rew_mean time/	2.03e+03
fps	120
iterations	1244
<pre> time_elapsed total_timesteps </pre>	5272 636928
train/	
approx_kl	0.0011713777
<pre> clip_fraction clip_range </pre>	0.000781 0.2
entropy_loss	-0.483
explained_variance	0.617
learning_rate	1e-06

loss n_updates policy_gradient_loss	375 12430 -0.00284
value_loss	865
1 11 /	
rollout/	
<pre>ep_len_mean ep rew mean</pre>	1.24e+03
time/	2.030103
fps	1 120
iterations	1245
time elapsed	5276
total_timesteps	637440
train/	1
approx_kl	0.0031396248
clip_fraction	0.0176
clip_range	0.2
entropy_loss	-0.422
explained_variance	0.829
learning_rate	1e-06
loss	42.1 12440
<pre>n_updates policy gradient_loss</pre>	1 1
value loss	133
	1 722
rollout/	1
ep len mean	1.24e+03
ep_rew_mean	2.03e+03
time/	ı i
fps	120
iterations	1246
time_elapsed	5281
total_timesteps	637952
train/	
approx_kl	0.0008525457
clip_fraction	0
clip_range	0.2
entropy_loss	-0.494
explained_variance	0.823
learning_rate	1e-06
loss	123
<pre>n_updates policy_gradient_loss</pre>	12450
value loss	-0.00121 314
	314
rollout/	I I
ep_len_mean	1.24e+03
ep_rew_mean	2.03e+03
time/	į į
fps	120
iterations	1247
time_elapsed	5285
total_timesteps	638464
train/	
approx_kl	0.004848604
clip_fraction	1 0 0300 .
	0.0268
clip_range	0.2
entropy_loss	0.2
entropy_loss explained_variance	0.2 -0.457 0.808
entropy_loss explained_variance learning_rate	0.2
entropy_loss explained_variance learning_rate loss	0.2
entropy_loss explained_variance learning_rate loss n_updates	0.2
<pre>entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss</pre>	0.2
entropy_loss explained_variance learning_rate loss n_updates	0.2
<pre>entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss</pre>	0.2
<pre>entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss</pre>	0.2
entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss	0.2
<pre> entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss</pre>	0.2
<pre> entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss</pre> rollout/ ep_len_mean	0.2
<pre> entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss</pre> rollout/ ep_len_mean ep_rew_mean	0.2
<pre> entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations</pre>	0.2
<pre> entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed</pre>	0.2
<pre> entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps</pre>	0.2
<pre> entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/</pre>	0.2
entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl	0.2
entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction	0.2
entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range	0.2
entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction	0.2

learning_rate loss	1e-06 38.9
n_updates	12470
<pre>policy_gradient_loss value loss</pre>	-0.00366
	03.0
rollout/	
ep_len_mean ep rew mean	1.23e+03 2.03e+03
time/	2.056+05
fps	120
iterations	1249
time_elapsed	5293
total_timesteps	639488
train/ approx kl	0.00046382728
clip fraction	0.00040302720
clip_range	0.2
entropy_loss	-0.309
explained_variance	0.505
learning_rate loss	1e-06 373
n updates	12480
policy_gradient_loss	
value_loss	806
rollout/	
rollout/ ep_len_mean	1.22e+03
ep_rew_mean	2.03e+03
time/	i i
fps	120
iterations	1250
time_elapsed total_timesteps	5299 640000
train/	040000
approx_kl	0.0007538451
clip_fraction	0.00215
clip_range	0.2
entropy_loss explained variance	-0.308
learning rate	1e-06
loss	35.5
n_updates	12490
policy_gradient_loss	
value_loss	107
rollout/	1
ep_len_mean	1.21e+03
ep_rew_mean	2.02e+03
time/ fps	120
iterations	1251
100.0010	
time elapsed	5303
<pre>time_elapsed total_timesteps</pre>	
total_timesteps train/	5303 640512
total_timesteps train/ approx_kl	5303 640512
total_timesteps train/ approx_kl clip_fraction	5303
total_timesteps train/ approx_kl clip_fraction clip_range	5303 640512
total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance	5303
total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss	5303
total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss	5303
total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates	5303
total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss	5303
total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates	5303
total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss	5303
total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss	5303
total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean	5303
total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean	5303
total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/	5303
total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean	5303
total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed	5303
total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps	5303
total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/	5303
total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl	5303
total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/	5303

```
explained variance
                     | 0.476
   learning_rate
                      | 1e-06
                      473
   loss
   n_updates
                      | 12510
   policy_gradient_loss | -0.000796
                 | 796
   value loss
                        1.2e+03
   ep_len_mean
  ep_rew_mean
                      | 2e+03
time/
  fps
                      | 120
   iterations
                      | 1253
                    | 5311
| 641536
   time elapsed
  total timesteps
                      | 0.0011759765
  approx kl
   clip fraction
                      0.00937
                      0.2
   clip_range
                      | -0.249
   entropy_loss
   explained_variance | 0.473
                    | 1e-06
   learning_rate
                      | 507
   n updates
                     | 12520
   policy_gradient_loss | -0.000276
   value loss | 619
rollout/
   ep len mean
  ep_rew_mean
                      1 2e+03
                      | 120
  fps
  iterations
                      | 1254
  time_elapsed
                      | 5316
  total_timesteps
                     | 642048
train/
   approx_kl
                      0.0005957752
   clip_fraction
                      | 0.000781
   clip_range
                     | 0.2
                      | -0.401
   entropy_loss
   explained variance | 0.684
                      l 1e-06
   learning_rate
                      | 127
                      | 12530
   n updates
   policy_gradient_loss | -0.00171
   value_loss | 509
                      | 1.2e+03
  ep_len_mean
  ep_rew_mean
                     | 2e+03
time/
                      | 120
  fps
                      1255
  iterations
   time_elapsed
                    | 5320
  total_timesteps
                      | 642560
train/
                      0.0020559363
  approx kl
                      | 0.0104
   clip_fraction
  clip_range
entropy_loss
                      0.2
                      | -0.53
   explained variance | 0.794
                     | 1e-06
   learning_rate
   loss
                      | 108
                      | 12540
   n_updates
   policy_gradient_loss | -0.000299
   value_loss
                      | 385
                     | 1.2e+03
  ep_len_mean
                      | 2e+03
  ep rew mean
time/
                      | 120
  fps
                      | 1256
  iterations
                      | 5324
   time elapsed
  total_timesteps
                      | 643072
train/
                      | 0.0030969097
   approx_kl
   clip fraction
                      | 0.0189
   clip_range
                      0.2
```

entropy_loss	-0.568	
· · · · · · · · · · · · · · · · · · ·	0.765 1e-06	
: - :	1e-06 170	
n updates	12550	
policy_gradient_loss		
value_loss	765	
mallout/		
rollout/ ep_len_mean		
ep_ten_mean	1.196+03 2e+03	
time/	20105	
fps	120	
iterations	1257	
time_elapsed	5328	
total_timesteps	643584	
train/		
approx_kl clip_fraction	0.002336562 0.00898	
	0.00898 0.2	
entropy_loss	-0.493	
	0.475	
learning_rate	le-06	
loss	96.4	
n_updates	12560	
	-0.000619	
value_loss	397	
rollout/	l I	
ep_len_mean	1.19e+03	
ep_rew_mean	2e+03	
time/		
fps iterations	120 1258	
time_elapsed	5332	
total timesteps	644096	
train/	İ	
approx_kl	0.0014107667	
clip_fraction	0	
clip_range	0.2	
' ',=	-0.53	
• • =	0.391 1e-06	
l loss	539	
n_updates	12570	
<pre>policy_gradient_loss </pre>	-0.00067	
value_loss	1.26e+03	
rollout/	l I	
ep_len_mean	1.18e+03	
ep_rew_mean	1.98e+03	
time/		
fps	120	
iterations time elapsed	1259 5337	
total timesteps	644608	
train/		
approx_kl	0.0016267538	
clip_fraction	0.0186	
clip_range	0.2	
entropy_loss	-0.385	
· · · –	0.858	
<pre> learning_rate loss</pre>	1e-06 104	
n updates	12580	
policy_gradient_loss		
value_loss	241	
rollout/	I	
ep_len_mean		
ep rew mean	1.98e+03	
time/		
fps	120	
iterations	1260	
time elapsed		
	5341	
total_timesteps	5341 645120	
total_timesteps train/	645120 	
total_timesteps		

```
clip_range
                      0.2
   entropy_loss
                      | -0.389
   explained_variance | 0.548
   learning_rate
                      | 1e-06
                      | 165
   loss
                     | 12590
   n updates
   policy_gradient_loss | -0.000846
   value_loss | 656
rollout/
   ep_len_mean
                        1.18e+03
  ep_rew_mean
                      | 1.98e+03
time/
                      120
                      | 1261
   iterations
   time elapsed
                    645632
  total timesteps
train/
  approx_kl
                      | 0.00037833303
   clip_fraction
                     | 0.2
   clip_range
  entropy_loss | -0.405
explained_variance | 0.916
   learning_rate
                     | 1e-06
                     | 90.7
   loss
   n updates
   policy_gradient_loss | 0.000438
   value loss | 160
                      | 1.17e+03
   ep len mean
  ep_rew_mean
                     | 1.97e+03
time/
                      120
  fps
  iterations
                     | 1262
                    | 5349
| 646144
  time_elapsed
  total_timesteps
                      0.002526968
  approx_kl
                     | 0.0242
  clip_fraction
                     | 0.2
   clip_range
                      | -0.443
   entropy_loss
   explained variance | 0.882
   learning_rate | 1e-06
                      | 104
   n updates
                      12610
   policy_gradient_loss | -0.00409
   value_loss | 261
  ep_len_mean
                    | 1.17e+03
| 1.97e+03
  ep_rew_mean
                      | 120
  iterations | 1263
time_elapsed | 5353
total_timesteps | 646656
train/
                      0.00034813117
  approx kl
                     0.000391
   clip fraction
   clip_range
                     | -0.333
   entropy_loss
   explained_variance | 0.524
                      | 1e-06
   learning_rate
   loss
                      | 12620
   n_updates
   policy_gradient_loss | 0.000139
   value_loss
                      | 805
rollout/
                      | 1.16e+03
  ep len mean
  ep_rew_mean
                     1.97e+03
time/
                      | 120
                      | 1264
  iterations
   time elapsed
                      | 5358
                      | 647168
  total_timesteps
train/
                      0.0011220764
  approx_kl
```

```
clip_fraction
                      0.00234
   clip_range
                     0.2
   entropy_loss
                      | -0.353
   explained_variance | 0.51
   learning_rate
                      | 1e-06
                      | 62
                     | 12630
   n updates
   policy_gradient_loss | -0.000153
   value loss | 229
rollout/
  ep len mean
                       1.16e+03
                     | 1.97e+03
  ep_rew_mean
time/
                      1 120
  fps
  iterations
                      1265
                    | 5362
  time elapsed
   total timesteps
                      | 647680
train/
  approx kl
                      0.00021600607
   clip_fraction
   clip range
                     0.2
  entropy_loss
                     | -0.473
   explained variance | 0.201
                    | 1e-06
   learning_rate
                     | 323
                      | 12640
  n_updates
   policy_gradient_loss | -0.00029
   value_loss | 1.04e+03
  ep_len_mean
                    | 1.16e+03
  ep_rew_mean
                     | 1.97e+03
time/
  fps
                      | 120
                      | 1266
  iterations
   time_elapsed
                     | 5366
  total_timesteps
                     | 648192
                      | 0.0005165951
  approx_kl
   clip fraction
                     0.000195
                     0.2
   clip range
   entropy loss
                     | -0.398
   explained variance | 0.902
   learning_rate | 1e-06
  loss
                      36.5
   n_updates
                      | 12650
   policy_gradient_loss | -0.000608
   value_loss
                    | 117
rollout/
  ep_len_mean
                     | 1.16e+03
  ep rew mean
                      | 1.97e+03
time/
  fps
                      | 120
   iterations
                      | 1267
   time elapsed
                      | 5370
  total_timesteps
                      | 648704
train/
                      0.0014188336
   approx_kl
   clip fraction
                     0.00313
   clip_range
                     0.2
                      -0.426
   entropy_loss
   explained_variance | 0.821
   learning_rate
                      | 1e-06
                       307
   loss
                      | 12660
   n updates
   {\tt policy\_gradient\_loss~|~-0.000901}
rollout/
  ep len mean
                      1.16e+03
                      | 1.97e+03
  ep_rew_mean
time/
                      | 120
                      | 1268
   iterations
                      | 5375
   time_elapsed
   total timesteps
                      | 649216
train/
```

approx kl	0.00091971084
clip_fraction	0.000195
	0.2
: · · · · · · · · · · · · · · · · · · ·	-0.293
	0.904
learning_rate	l 1e-06
l loss	35
n updates	12670
	-0.00105
	120
vatuc_t033	120
rollout/	
•	
ep_len_mean	1.15e+03
ep_rew_mean	1.96e+03
time/	
fps	120
iterations	1269
time_elapsed	5379
total_timesteps	649728
train/	
approx_kl	0.0014092171
clip_fraction	0.00937
clip_range	0.2
entropy_loss	-0.312
explained_variance	0.302
learning_rate	1e-06
loss	100
n_updates	12680
1 1 1 1 1	-0.00201
value_loss	880
rollout/	
ep_len_mean	1.15e+03
ep_rew_mean	1.96e+03
time/	
fps	120
iterations	1270
time_elapsed	5384
total_timesteps	650240
train/	
approx_kl	0.0019740323
clip_fraction	0.0145
clip_range	0.2
entropy_loss	-0.357
	0.557
learning_rate	1e-06
loss	718
	12690
1 1 1 2	-0.00397
value_loss	560
rollout/	
ep_len_mean	1.15e+03
ep_rew_mean	1.96e+03
time/	
fps	120
iterations	1271
time_elapsed	5388
total_timesteps	650752
train/	
approx_kl	0.0007764868
clip_fraction	0.000195
	0.2
entropy_loss	-0.435
• •	0.867
3_	1e-06
loss	76.3
l n undatoc	I 12700 I
n_updates	12700
policy_gradient_loss	-8.64e-05
policy_gradient_loss	
policy_gradient_loss	-8.64e-05
policy_gradient_loss value_loss	-8.64e-05
<pre>policy_gradient_loss value_loss prollout/</pre>	-8.64e-05
<pre>policy_gradient_loss value_loss rollout/ ep_len_mean</pre>	-8.64e-05
policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean	-8.64e-05
policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/	-8.64e-05
policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps	-8.64e-05
policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations	-8.64e-05 181 1.15e+03 1.96e+03 120
policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed	-8.64e-05 181 1.15e+03 1.96e+03 120 1272
policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed	-8.64e-05

train/ approx kl	 0.00038078544
clip_fraction	0.00030070344
clip range	0.2
entropy_loss	-0.351
explained_variance	0.68
<pre> learning_rate loss</pre>	1e-06 243
n updates	12710
. = .	-0.000298
value_loss	431
rollout/	
ep_len_mean	1.15e+03
ep_rew_mean	1.96e+03
time/ fps	
iterations	1273
time_elapsed	5396
total_timesteps	651776
train/	0.0010227002
approx_kl clip_fraction	0.0018237903 0.0115
clip_range	0.2
entropy_loss	-0.322
	0.866
learning_rate	l 1e-06
loss n updates	40.6 12720
	-0.000493
value_loss	100
rollout/	
ep len mean	1.15e+03
ep_rew_mean	1.96e+03
time/	
fps iterations	120 1274
time_elapsed	5401
total_timesteps	652288
train/	İ
approx_kl	0.0011123645
<pre> clip_fraction clip range</pre>	0.00293 0.2
entropy_loss	-0.33
explained_variance	0.497
learning_rate	1e-06
loss n updates	437 12730
policy_gradient_loss	0.000422
value_loss	822
rollout/	
ep_len_mean	1.14e+03
ep_rew_mean	1.95e+03
time/	
fps iterations	120 1275
time_elapsed	5405
total_timesteps	652800
train/	
approx_kl clip_fraction	0.0025313878 0.0109
clip_rraction	0.0109
entropy_loss	-0.297
explained_variance	0.751
J	le-06
loss n updates	21.7 12740
	-0.00173
value_loss	118
rollout/	I
ep_len_mean	1.14e+03
ep_rew_mean	1.94e+03
time/	120
fps iterations	120 1276
time elapsed	5409
- ' '	

```
total_timesteps
                         | 653312
train/
   approx kl
                         0.00019135966
   clip_fraction
                         | 0
   clip range
                        0.2
                        | -0.325
   entropy_loss
   explained_variance | 0.701
   learning_rate | 1e-06
                         28.8
   loss
   n_updates
                       | 12750
   policy_gradient_loss | -0.000581
   value_loss
               | 400
rollout/
   ep_len_mean
ep_rew_mean
                      | 1.14e+03
| 1.94e+03
time/
   fps
                        | 1277
   iterations
                      | 5413
| 653824
   time_elapsed
   total_timesteps
train/
                        | 0.0009227551
   approx_kl
   approx_kl | 0.00092:
clip_fraction | 0.00293
clip_range | 0.2
entropy_loss | -0.37
explained_variance | 0.379
   learning_rate | 1e-06
                        | 192
   loss
   n_updates
                        | 12760
   policy_gradient_loss | -0.000972
   value_loss
rollout/
   ep_len_mean
ep_rew_mean
                       | 1.14e+03
                       | 1.94e+03
time/
                        | 120
                    | 120
| 1278
| 5418
   iterations
   time_elapsed
   total timesteps
                         | 654336
train/
                       0.0016542472
   approx kl
                       0.00918
   clip_fraction
                      0.2
   clip_range
entropy_loss
   explained_variance | 0.733
   learning_rate | 1e-06
   loss
                        | 79.4
   n updates
                        | 12770
   policy_gradient_loss | -0.000441
   value loss
                | 225
rollout/
                     1.15e+03
   ep_len_mean
ep_rew_mean
                        | 1.95e+03
time/
                        | 120
   fps
  iterations | 1279
time_elapsed | 5422
total_timesteps | 654848
train/
   approx_kl
                        0.0009530247
   clip_fraction
                        | 0.00273
   clip range
                       | 0.2
   entropy_loss | -0.477
explained_variance | 0.842
                         | 1e-06
   learning_rate
                         | 60.5
                        | 12780
   n_updates
   policy_gradient_loss | -3.71e-05
   value loss
                    | 172
rollout/
   ep_len_mean
                         | 1.15e+03
   ep rew mean
                         | 1.95e+03
time/
                         | 120
   fps
   iterations
                         | 1280
```

```
time elapsed
                      | 5426
                      | 655360
  total_timesteps
train/
                      0.0002676188
  approx_kl
  clip fraction
                      0.2
  clip_range
                      i -0.47
  entropy loss
  explained_variance | 0.365
                      le-06
  learning_rate
  loss
                      | 462
                      | 12790
  n updates
  policy_gradient_loss | -0.00118
                      | 1.38e+03
  value loss
rollout/
  ep len mean
                     1.95e+03
  ep rew mean
time/
  fps
                      | 120
  iterations
                      | 1281
  time_elapsed
                    | 5430
                    | 655872
  total_timesteps
train/
  approx kl
                     0.0015610665
                    | 0.00371
  clip_fraction
  clip range
                     0.2
  entropy_loss
                      | -0.396
  explained variance | 0.892
                    | 1e-06
  learning_rate
                      | 49.2
  n updates
                      12800
  policy gradient loss | -0.00081
  value_loss | 133
                    | 1.13e+03
  ep_len_mean
  ep_rew_mean
                     | 1.93e+03
time/
                      | 120
                    | 1282
  iterations
                    | 5434
  time elapsed
  total_timesteps
                     656384
                      0.0023056222
  approx kl
  clip_fraction
                     | 0.0154
  clip range
                     0.2
  entropy_loss
                     | -0.394
  explained_variance | 0.443
  learning_rate
                     | 1e-06
                      | 145
  loss
  n updates
                      | 12810
  policy_gradient_loss | -0.00526
  value_loss | 313
rollout/
                     | 1.13e+03
  ep_len_mean
  ep_rew_mean
                     | 1.93e+03
time/
                      120
  fps
                     | 1283
  iterations
  time elapsed
  total_timesteps
                    | 656896
train/
                      0.0016310419
  approx_kl
  clip_fraction
                     0.026
  clip_range
                      0.2
  entropy_loss
                     | -0.332
  explained_variance | 0.619
  learning_rate
                      | 1e-06
                      | 208
  loss
                      12820
  n updates
  policy gradient loss | -0.000557
  value loss
  ep len mean
                      | 1.13e+03
                      | 1.93e+03
  ep_rew_mean
time/
                      | 120
 fps
```

```
iterations
                       | 1284
   time_elapsed
                       | 5443
   total timesteps
                       657408
train/
                       0.000565697
  approx kl
   clip_fraction
                       0.2
   clip range
   entropy_loss
                       | -0.348
   explained variance
                     0.892
                       | 1e-06
   learning_rate
   loss
                       12830
   n_updates
   policy_gradient_loss | 0.000201
                       | 155
   value_loss
  ep_len_mean
ep_rew_mean
                        1.13e+03
                      1.93e+03
time/
  fps
                       | 120
   iterations
                        1285
   time elapsed
                        5447
   total_timesteps
                      | 657920
                       | 0.00052863616
   approx_kl
   clip fraction
                      | 0.000781
                      0.2
   clip_range
   entropy loss
                       -0.489
   explained_variance | 0.537
   learning_rate
                       | 1e-06
   loss
                       i 390
   n_updates
                       | 12840
   policy_gradient_loss | -0.00163
   value loss
                       | 789
rollout/
   ep_len_mean
                       | 1.13e+03
   ep_rew_mean
                       | 1.92e+03
time/
  fps
                       | 120
                      | 1286
   iterations
                       | 5451
   time elapsed
   total timesteps
                       | 658432
train/
                      0.00040582975
   approx_kl
   clip fraction
   clip_range
                      0.2
                      | -0.364
   entropy_loss
   explained_variance
                      | 0.86
   learning_rate
                       | 1e-06
   loss
                       | 173
   n updates
                       | 12850
   policy_gradient_loss | -0.00102
   value loss
rollout/
                       | 1.13e+03
   ep len mean
   ep_rew_mean
                      | 1.92e+03
time/
                      | 120
  fps
   iterations
                      1287
                     | 5456
   time_elapsed
   total_timesteps
                       658944
train/
   approx kl
                      0.0022658568
   clip_fraction
                      | 0.0174
   clip range
                       0.2
                       | -0.279
   entropy_loss
   explained variance
                     0.389
   learning_rate
                       | 1e-06
                       173
   n_updates
                       12860
   policy_gradient_loss | -0.00153
   value loss
                       | 1.13e+03
   ep_len_mean
   ep_rew_mean
                       | 1.92e+03
time/
```

```
fps
                      | 120
                      | 1288
   iterations
   time_elapsed
                      5460
                      659456
   total timesteps
train/
   approx kl
                      | 0.0015369297
                     0.00625
   clip fraction
   clip_range
                      0.2
  entropy_loss
                     | -0.448
   explained_variance | 0.861
   learning_rate
                    | 1e-06
   loss
                      | 115
   n updates
                      | 12870
   policy_gradient_loss | -0.000649
   value loss
rollout/
  ep len mean
                       1.13e+03
                      | 1.93e+03
   ep_rew_mean
time/
                      | 120
  fps
   iterations
                      | 1289
   time elapsed
                     | 5464
                    659968
  total timesteps
train/
                     | 0.0036056282
  approx kl
   clip_fraction
                     0.0338
   clip range
                     0.2
                     | -0.392
   entropy_loss
   explained variance | 0.84
                      l 1e-06
   learning_rate
                      | 71.5
   n updates
                     | 12880
   policy gradient loss | -0.00235
                     | 210
   value_loss
rollout/
  ep_len_mean
                      | 1.13e+03
  ep_rew_mean
                     | 1.93e+03
time/
                      | 120
                      | 1290
  iterations
  time_elapsed
                    | 5469
  total_timesteps
                    660480
train/
                      0.003081086
  approx kl
   clip_fraction
                     0.0295
   clip_range
                     0.2
   entropy_loss
                      | -0.403
   explained_variance | 0.769
   learning_rate
                      | 1e-06
                      | 121
                      | 12890
   n updates
   policy_gradient_loss | -0.00594
   value_loss | 387
rollout/
                     | 1.13e+03
   ep_len_mean
  ep rew mean
                     | 1.93e+03
time/
                      120
                     | 1291
   iterations
                    | 5473
   time elapsed
   total_timesteps
                      | 660992
train/
                      0.00051046896
  approx_kl
   clip fraction
                     | 0.000781
                      0.2
   clip_range
   entropy loss
                     | -0.403
   explained_variance | 0.873
   learning rate
                      le-06
   loss
                      | 131
   n_updates
                      12900
   policy_gradient_loss | -0.000881
rollout/
  ep len mean
                     | 1.14e+03
                     | 1.95e+03
   ep_rew_mean
```

```
time/
                        120
   fps
   iterations
                        1292
                       | 5478
   time_elapsed
                       | 661504
   total_timesteps
                        0.00076873554
   approx kl
   clip_fraction
                       | 0.000195
   clip range
                      0.2
   entropy_loss
                       | -0.443
   explained_variance | 0.842
                       | 1e-06
   learning_rate
                       68.6
   loss
                       | 12910
   n_updates
   policy_gradient_loss | 0.000128
   value_loss
                       | 206
rollout/
   ep_len_mean
                        1.15e+03
                     | 1.96e+03
   ep_rew_mean
time/
                       | 120
   fps
                      1293
   iterations
                     | 5482
   time elapsed
   total_timesteps
                      | 662016
train/
                       | 0.0037214775
  approx_kl
   clip fraction
                      0.0209
   clip_range
entropy_loss
                      0.2
                      | -0.379
   explained_variance | 0.221
                       | 1e-06
   learning_rate
   loss
                       i 130
   n updates
                       | 12920
   policy_gradient_loss | -0.00555
   value loss
   ep_len_mean
                      | 1.15e+03
  ep_rew_mean
                      | 1.96e+03
time/
  fps
                       1 120
                      | 1294
   iterations
                      | 5486
   time elapsed
   total_timesteps
                      662528
train/
                      | 0.001100876
   approx_kl
                     0.0082
   clip_fraction
   clip_range
                      0.2
                      | -0.394
   entropy_loss
   explained_variance | 0.733
                     | 1e-06
   learning_rate
                       | 412
   loss
                      12930
   n updates
   policy_gradient_loss | -0.00216
   value loss
                       | 570
rollout/
                      | 1.15e+03
   ep len mean
   ep rew mean
                       | 1.96e+03
time/
                      | 120
                      | 1295
   iterations
                       | 5490
   time_elapsed
  total_timesteps
                       | 663040
train/
   approx kl
                      | 0.0042003165
                      | 0.0164
   clip_fraction
   clip range
                      0.2
   entropy_loss
                      | -0.399
   explained variance | 0.831
                       l 1e-06
   learning_rate
                       | 58.3
                       | 12940
   n updates
   policy gradient loss | -0.006
   value_loss
rollout/
                       | 1.14e+03
  ep_len_mean
```

```
ep rew mean
                       | 1.95e+03
 time/
                       120
    fps
                       | 1296
    iterations
                       | 5494
    time elapsed
    total_timesteps
                      663552
                       0.0025920882
    approx kl
    clip fraction
                      0.0457
    clip_range
entropy_loss
                      | 0.2
                       | -0.483
    explained_variance | 0.444
    learning_rate
                       | 1e-06
                       | 380
    loss
    n updates
                       12950
    policy_gradient_loss | -0.00177
    value loss
 rollout/
    ep len mean
                       | 1.14e+03
                       | 1.95e+03
    ep_rew_mean
 time/
                       | 120
   fps
    iterations
                      | 1297
                     5499
    time_elapsed
    total timesteps
                       | 664064
 train/
                      0.00053466496
    approx kl
    clip_fraction
                      0.00117
    clip_range
entropy_loss
                     0.2
-0.459
    explained variance | 0.621
    learning_rate | 1e-06
    loss
                       | 342
                       12960
    n_updates
    policy_gradient_loss | -0.00112
               | 565
    value_loss
 rollout/
                     | 1.14e+03
    ep len mean
    ep rew mean
                       | 1.95e+03
 time/
                       | 120
   fps
                      | 1298
    iterations
    time_elapsed
                     | 5503
| 664576
    total_timesteps
 train/
    approx_kl
                      0.00059977244
                      0.00449
    clip_fraction
                      0.2
    clip range
                      | -0.496
    entropy_loss
    explained_variance | 0.889
                       | 1e-06
    learning_rate
                       | 70.7
                      | 12970
    n_updates
    policy_gradient_loss | -0.000465
    value_loss | 180
 rollout/
                     1.15e+03
1.96e+03
    ep len mean
    ep rew mean
 time/
                       120
   fps
                       | 1299
    iterations
    time elapsed
                      5507
                     665088
   total_timesteps
 train/
                       0.0022143857
    approx_kl
    clip fraction
                      | 0.00273
    clip range
                      | 0.2
    entropy loss
                       | -0.599
    explained_variance | 0.823
    learning_rate
                       le-06
                       | 121
    loss
                       | 12980
    n_updates
    policy_gradient_loss | -0.00057
    value_loss | 335
| rollout/
```

```
ep len mean
                       | 1.15e+03
   ep_rew_mean
                       | 1.96e+03
time/
                       | 120
  fps
                      | 1300
   iterations
   time_elapsed
                      | 5511
  total timesteps
                     i 665600
train/
                      | 0.0070259194
  approx kl
                      0.0627
   clip_fraction
   clip range
                      | 0.2
   entropy_loss
                      | -0.712
   explained variance | 0.512
   learning_rate
                      | 1e-06
                      186
   loss
   n_updates
                      12990
   policy gradient loss | -0.00481
   value_loss | 899
rollout/
                      | 1.15e+03
   ep_len_mean
  ep_rew_mean
                     | 1.96e+03
time/
                      | 120
  iterations | 1301
time_elapsed | 5516
total_timesteps | 666112
train/
                      0.00461815
  approx_kl
                     | 0.0566
   clip fraction
  clip_range
                      0.2
  entropy_loss
                      | -0.677
   explained_variance | 0.851
   learning_rate | 1e-06
                      | 66.4
   loss
                     13000
   n updates
   policy_gradient_loss | -0.00522
   value_loss | 151
rollout/
                    | 1.15e+03
| 1.96e+03
   ep len mean
  ep_rew_mean
time/
  fps
                       120
                      | 1302
  iterations
   time elapsed
                     | 5520
  total_timesteps
                     | 666624
train/
                      | 0.0025600684
  approx_kl
                     0.0082
   clip_fraction
   clip_range
                     | 0.2
  entropy_loss | -0.713
explained_variance | 0.678
                      | 1e-06
   learning_rate
                      | 203
  loss
                      | 13010
   n updates
   policy_gradient_loss | -0.00239
                  | 431
   value loss
rollout/
  ep_len_mean
                      1.15e+03
                     | 1.96e+03
  ep_rew_mean
time/
                      | 120
  fps
  iterations
                      | 1303
                     | 5524
   time_elapsed
   total_timesteps
                     | 667136
train/
  approx kl
                      0.0016905743
                     | 0.00117
   clip_fraction
   clip range
                     0.2
                      | -0.572
   entropy_loss
   explained variance | 0.81
                      l 1e-06
   learning_rate
                       97.6
   loss
   n updates
                      | 13020
   policy_gradient_loss | -0.00204
                      | 372
   value_loss
```

```
rollout/
                        1.15e+03
   ep_len_mean
  ep rew mean
                      | 1.96e+03
time/
                      1 120
  fps
                        1304
   iterations
   time elapsed
                        5528
                      | 667648
   total_timesteps
                      | 0.0010220294
  approx_kl
  clip_fraction
                      0.00215
   clip_range
                      0.2
  entropy_loss
                      | -0.541
   explained variance | 0.704
                     | 1e-06
   learning rate
  loss
                      1 51.6
  n updates
                      13030
   policy_gradient_loss | -0.000558
   value loss | 167
rollout/
  ep len mean
                      | 1.15e+03
                      | 1.96e+03
  ep_rew_mean
time/
                      | 120
  fps
   iterations
                     | 1305
   time_elapsed
                      | 5533
  total_timesteps
                      | 668160
train/
                     0.005439641
0.0307
   approx_kl
  clip_fraction
   clip range
                     0.2
  entropy_loss | -0.677
explained_variance | 0.888
                      l 1e-06
   learning_rate
  loss
                      | 43.8
                     | 13040
  n_updates
   policy_gradient_loss | -0.00511
                      | 123
   value_loss
rollout/
                      | 1.15e+03
  ep len mean
   ep rew mean
                      | 1.96e+03
time/
                      | 120
  fps
                      1306
  iterations
  time_elapsed
                     | 5537
  total_timesteps
                      | 668672
train/
  approx kl
                      0.0038542007
                      0.0311
   clip_fraction
  clip_range
                      0.2
   entropy_loss
                      | -0.675
   explained variance | 0.72
                      | 1e-06
   learning_rate
   loss
                      | 376
   n_updates
                      | 13050
   policy_gradient_loss | -0.00768
   value_loss
                      | 473
```

rollout/	
ep_len_mean	1.15e+03
ep_rew_mean	1.96e+03
time/	
fps	120
iterations	1307
time_elapsed	5541
<pre>total_timesteps</pre>	669184
train/	
approx_kl	0.006229996
clip_fraction	0.0582
clip_range	0.2
entropy_loss	-0.659
<pre> explained_variance</pre>	0.873
learning_rate	1e-06
loss	52.3
n_updates	13060
<pre>policy_gradient_loss</pre>	-0.00685
value_loss	189

```
rollout/
  ep len mean
                        1.15e+03
   ep_rew_mean
                      | 1.97e+03
time/
                      | 120
  fps
                        1308
   iterations
   time elapsed
                      | 5545
  total_timesteps
                      669696
train/
  approx kl
                      0.0046766056
  clip_fraction
                      0.00762
                      0.2
  clip range
   entropy_loss
                      | -0.651
   explained variance | 0.917
                      l 1e-06
  learning_rate
                      | 81.5
                      | 13070
   n_updates
   policy gradient loss | -0.00404
   value_loss | 156
rollout/
   ep_len_mean
                       1.16e+03
  ep_rew_mean
time/
                      | 120
                      | 1309
  iterations
  time elapsed
                     5550
                    | 670208
  total_timesteps
                      0.0016443139
  approx kl
                     | 0.00547
   clip fraction
   clip_range
                     0.2
   entropy loss
                      | -0.54
   explained_variance | 0.725
  learning_rate
                      | 1e-06
                      | 148
  loss
   n_updates
                      | 13080
   policy_gradient_loss | -0.00138
   value_loss | 410
rollout/
  ep len mean
                     | 1.16e+03
  ep_rew_mean
                    1.97e+03
time/
  fps
                      120
                     | 1310
  iterations
                    | 5555
   time elapsed
   total_timesteps
                      | 670720
train/
                      | 0.0013600797
  approx_kl
   clip fraction
                     0.00215
  clip_range
entropy_loss
                      0.2
                      | -0.628
   explained_variance | 0.913
   learning_rate
                    | 1e-06
   loss
                      I 199
   n updates
                      | 13090
   policy_gradient_loss | -0.000443
   value loss
                      | 269
rollout/
                    | 1.16e+03
  ep len mean
                      | 1.97e+03
  ep_rew_mean
time/
                      | 120
  fps
                       1311
   iterations
   time_elapsed
                      | 5559
   total_timesteps
                      | 671232
train/
  approx kl
                      | 0.0022110953
                      0.0139
   clip_fraction
   clip range
                      0.2
                      | -0.43
   entropy_loss
   explained variance
                     | 0.835
   learning_rate
                      | 1e-06
   loss
                      | 58.4
                      | 13100
   n updates
   policy_gradient_loss | -0.00169
                      | 157
   value_loss
```

rollout/ | 1.15e+03 ep_len_mean ep rew mean 1.97e+03 time/ 120 fps | 1312 iterations time elapsed 5563 total_timesteps | 671744 train/ 0.0008230378 approx_kl 0.00898 clip fraction clip_range entropy_loss 0.2 entropy_loss | -0.531 explained_variance | 0.923 learning_rate l 1e-06 | 77.5 loss n updates | 13110 policy_gradient_loss | -0.00179 value loss | 232 ep_len_mean ep_rew_mean | 1.15e+03 1.97e+03 time/ | 120 fps iterations | 1313 time_elapsed | 5567 total timesteps | 672256 train/ 0.00025606528 approx_kl | 0 clip_fraction | 0.2 clip range | -0.464 entropy_loss explained variance | 0.548 le-06 learning_rate loss | 315

policy_gradient_loss | -6.86e-05
value_loss | 936

13120

n_updates

rollout/ 1.16e+03 ep len mean 1.97e+03 ep_rew_mean time/ | 120 fps | 1314 iterations time_elapsed | 5571 total_timesteps | 672768 train/ 0.0014632337 approx kl clip_fraction 0.0043 clip_range 0.2 entropy_loss | -0.614 explained variance | 0.643 learning_rate | 1e-06 loss | 13130 n_updates policy_gradient_loss | 0.0025 value_loss | 728

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ı	rollout/	1 1	
i	ep_len_mean	1.15e+03	
İ	ep_rew_mean	1.97e+03	
	time/		
	fps	120	
	iterations	1315	
	time_elapsed	5576	
	total_timesteps	673280	
	train/		
	approx_kl	0.0019359004	
	clip_fraction	0.00273	
	clip_range	0.2	
	entropy_loss	-0.448	
	<pre>explained_variance</pre>	0.842	
	learning_rate	1e-06	
	loss	54.2	
	n_updates	13140	
1	<pre>policy_gradient_loss</pre>	-0.00309	

value_loss	127
rollout/	1
ep_len_mean	1.15e+03
ep_rew_mean time/	1.96e+03
fps	1 120
iterations	1316
time_elapsed	5580
<pre> total_timesteps train/</pre>	673792
approx kl	0.002125383
clip_fraction	0.0225
clip_range	0.2
<pre> entropy_loss explained variance</pre>	-0.499
learning_rate	1e-06
loss	412
<pre> n_updates policy_gradient_loss</pre>	13150 -0.00287
value_loss	913
L mallout/	
rollout/ ep_len_mean	
ep_rew_mean	1.96e+03
time/	! i
fps	120 1317
<pre> iterations time elapsed</pre>	5584
total_timesteps	674304
train/	
approx_kl	0.0002781353 0.000391
<pre> clip_fraction clip range</pre>	0.000391
entropy_loss	-0.499
explained_variance	0.42
<pre> learning_rate loss</pre>	1e-06 410
n updates	13160
policy_gradient_loss	-2.49e-05
value_loss	679
rollout/	
ep_len_mean	
ep_len_mean ep_rew_mean	
ep_len_mean	1
ep_len_mean ep_rew_mean time/ fps iterations	1.96e+03
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed	1.96e+03
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps	1.96e+03
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl	1.96e+03
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction	1.96e+03
<pre>ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range</pre>	1.96e+03
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction	1.96e+03
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate	1.96e+03
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate	1.96e+03
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates	1.96e+03
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss	1.96e+03
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss	1.96e+03
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss	1.96e+03
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean	1.96e+03
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean	1.96e+03
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/	1.96e+03
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean	1.96e+03
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed	1.96e+03
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps	1.96e+03
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/	1.96e+03
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps	1.96e+03
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss	1.96e+03
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss	1.96e+03
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance	1.96e+03
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss	1.96e+03

policy_gradient_loss value_loss	-0.00386 413	
		-
L ==11==+/		-
rollout/	1 150,02	
ep_len_mean	1.15e+03 1.96e+03	
ep_rew_mean time/	1.900-03	
fps	120	
iterations	1320	
time_elapsed	5597	
total timesteps	675840	i
train/	0,00.0	i
approx kl	0.0021650665	i
clip_fraction	0.0256	i
clip_range	0.2	i
	-0.634	i
explained variance	0.874	i
l learning rate	1e-06	i
	122	i
n updates	13190	i
policy_gradient_loss	-0.000766	i
value loss	292	İ
		-
rollout/		
ep_len_mean	1.15e+03	
ep_rew_mean	1.96e+03	
time/		
fps	120	
iterations	1321	
time_elapsed	5601	
total_timesteps	676352	
train/		
approx_kl	0.00074403477	'
clip_fraction	0.00293	
clip_range	0.2	
entropy_loss	-0.603	
<pre> explained_variance </pre>	0.638	
learning_rate	1e-06	
loss	56.1	-
n_updates	13200	
policy_gradient_loss	-0.000985	- [
value_loss	146	
1		-
rollout/	1 140.02	
ep_len_mean	1.14e+03 1.95e+03	
ep_rew_mean time/	1.950+05	
	120	
fps iterations	120 1322	
time_elapsed	5605	
total timesteps	676864	
train/	070004	
approx kl	0.0025549307	
clip fraction	0.0023349307	
clip_rraction	0.2	1
entropy_loss	-0.762	
explained variance	0.873	
learning rate	1e-06	
loss	62.7	1
n updates	13210	
policy_gradient_loss	-0.00161	1
value_loss	218	I
''` '''		· -
rollout/	Ī	
ep len mean	1.14e+03	
ep rew mean	1.95e+03	
time/		
fps	120	
l iterations	1323	

n_updates policy_gradient_loss	
value_loss	1.03e+03
rollout/ ep_len_mean en_rew_mean	
ep_rew_mean time/	1.956+05
fps	120
iterations	1324
time_elapsed	5614 677888
<pre> total_timesteps train/</pre>	077000
approx_kl	0.0008940281
clip_fraction	0
clip_range entropy_loss	0.2 -0.718
	0.895
• • •	1e-06
loss	85.1
<pre> n_updates policy_gradient_loss </pre>	13230
	135
rollout/	
ep_len_mean ep rew mean	1.15e+03 1.95e+03
time/	
fps	120
iterations time elapsed	1325 5618
total timesteps	678400
train/	i
approx_kl	0.0023099508
<pre> clip_fraction clip_range</pre>	0.00957 0.2
	-0.742
explained_variance	0.57
learning_rate	1e-06
loss n updates	160 13240
	-0.00174
value_loss	810
rollout/	
ep_len_mean	1.15e+03
ep_rew_mean	1.95e+03
time/ fps	1 120
iterations	1326
time_elapsed	5622
<pre> total_timesteps train/</pre>	678912
approx kl	0.0025358617
clip_fraction	0.00645
clip_range	0.2
<pre> entropy_loss explained variance </pre>	-0.757 0.533
learning rate	1e-06
	67.8
n_updates	13250
! ' _ ' _ ' _ '	-0.00101 178
· :	 1.15e+03
ep_rew_mean	1.96e+03
time/	
fps iterations	120 1327
time_elapsed	5627
total_timesteps	679424
train/	
approx_kl clip fraction	0.0021422775 0.00293
• • •	0.2
entropy_loss	-0.818
explained_variance	0.781
learning_rate	1e-06

loss n_updates policy_gradient_loss value_loss	76.4 13260 -0.00281 154
rollout/	
ep_len_mean	1.15e+03
ep rew mean	1.96e+03
time/	į į
fps	120
iterations	1328
<pre> time_elapsed total_timesteps</pre>	5631 679936
train/	079930
approx kl	0.0014715169
clip_fraction	0
clip_range	0.2
entropy_loss	-0.818
explained_variance	0.559
learning_rate loss	1e-06 176
n updates	13270
	-0.000957
value_loss	621
rollout/ ep_len_mean	 1.15e+03
ep_ten_mean	1.15e+03 1.96e+03
ep_rew_mean time/	1.90e+05
fps	1 120
iterations	1329
time_elapsed	5636
total_timesteps	680448
train/	
approx_kl	0.0021369613 0.000195
<pre> clip_fraction clip range</pre>	0.000195
entropy_loss	-0.87
explained variance	0.851
learning_rate	1e-06
loss	76.1
n_updates	13280
policy_gradient_loss	-0.00126
value_loss	144
rollout/	
ep_len_mean	1.15e+03
ep_rew_mean	1.96e+03
time/	
fps iterations	120 1330
time elapsed	5640
total timesteps	680960
train/	ı i
approx_kl	0.00213528
clip_fraction	0
<pre> clip_range entropy loss</pre>	0.2 -0.922
entropy_toss explained variance	-0.922 0.877
learning_rate	1e-06
loss	126
n_updates	13290
<pre>policy_gradient_loss </pre>	
value_loss	289
	· · · · · · · · · · · · · · · · · · ·
rollout/	
ep len mean	1.15e+03
ep_rew_mean	1.96e+03
time/	į į
fps	120
iterations	1331
time_elapsed	5644 681472
<pre> total_timesteps train/</pre>	UO14/2
approx_kl	
clip_fraction	0.00293
clip_range	0.2
entropy_loss	-0.864
<pre> explained_variance </pre>	0.84

learning_rate	1e-06
loss	72.3 13300
<pre> n_updates policy_gradient_loss</pre>	
value loss	172
rollout/	1
ep_len_mean	1.15e+03
ep_rew_mean	1.97e+03
time/	
fps	120
iterations	1332
time_elapsed	5648
total_timesteps	681984
train/	
approx_kl	0.01005546
clip_fraction	0.0566
clip_range	0.2
entropy_loss	-0.932
explained_variance	0.875
learning_rate	1e-06
loss	57.6
n_updates	13310
policy_gradient_loss	
value_loss	156
L rollout/	
rollout/	
ep_len_mean	1.15e+03
ep_rew_mean	1.97e+03
time/	
fps iterations	120
iterations	1333
time_elapsed	5653
total_timesteps	682496
train/	0 0012402712
approx_kl	0.0013493713
clip_fraction	0
clip_range	0.2
entropy_loss	-0.903
explained_variance	0.419
learning_rate	1e-06
loss	385
n_updates	13320
policy_gradient_loss	0.000379 1.05e+03
value_loss	1.056+05
	1
rollout/	1 15 _{0±03}
ep_len_mean	1.15e+03 1.07e+03
ep_len_mean ep_rew_mean	1.15e+03 1.97e+03
ep_len_mean ep_rew_mean time/	1.97e+03
ep_len_mean ep_rew_mean time/ fps	1.97e+03
ep_len_mean ep_rew_mean time/ fps iterations	1.97e+03
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed	1.97e+03
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps	1.97e+03
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps	1.97e+03
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl	1.97e+03
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction	1.97e+03
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range	1.97e+03
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss	1.97e+03
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance	1.97e+03
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss	1.97e+03
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance	1.97e+03
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates	1.97e+03
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate	1.97e+03
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss	1.97e+03
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss	1.97e+03
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss	1.97e+03
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss	1.97e+03
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss	1.97e+03
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean	1.97e+03
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean	1.97e+03
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/	1.97e+03
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps	1.97e+03
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed	1.97e+03
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations	1.97e+03
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps	1.97e+03
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/	1.97e+03
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl	1.97e+03

```
explained variance
                     | 0.759
  learning_rate
                      | 1e-06
                      177
  loss
                      | 13340
  n_updates
  policy_gradient_loss | -0.00492
   value loss
  ep_len_mean
                        1.16e+03
                      | 1.98e+03
  ep_rew_mean
time/
  fps
                      | 120
  iterations
                        1336
  time elapsed
                        5665
  total timesteps
                      | 684032
train/
                      | 0.00608629
  approx_kl
  clip fraction
                      0.00898
                      0.2
  clip_range
                      | -1.03
  entropy_loss
  explained_variance | 0.821
                      | 1e-06
  learning_rate
                      I 211
                      | 13350
  n updates
  policy_gradient_loss | -0.0064
  value loss | 372
rollout/
  ep len mean
                        1.16e+03
                      | 1.98e+03
  ep_rew_mean
                      | 120
  fps
  iterations
                      | 1337
                      | 5670
  time_elapsed
  total_timesteps
                      | 684544
train/
  approx_kl
                      | 0.0047940337
                      0.0115
  clip_fraction
  clip_range
                      0.2
                      | -0.98
  entropy_loss
  explained_variance | 0.892
                      | 1e-06
  learning_rate
                      | 65.4
                      | 13360
  n updates
  policy_gradient_loss | -0.000804
  value loss | 133
                      | 1.16e+03
  ep_len_mean
  ep_rew_mean
                      | 1.98e+03
time/
                      | 120
  fps
  iterations
                      | 1338
  time_elapsed
                     | 5674
  total_timesteps
                      | 685056
train/
                      0.001910388
  approx kl
  clip_fraction
                      | 0.000781
  clip_range
                      0.2
  entropy_loss
                      | -1.03
  explained variance | 0.872
  learning_rate
                      | 1e-06
  loss
                      94.7
                      | 13370
  n_updates
  policy_gradient_loss | -0.000371
                      | 300
  value_loss
                      | 1.16e+03
  ep len mean
                      1.98e+03
  ep rew mean
time/
  fps
                      | 120
                        1339
  iterations
  time elapsed
                        5678
  total_timesteps
                      | 685568
train/
                      0.0029400052
  approx_kl
  clip fraction
                      0.000977
  clip_range
                      0.2
```

loss n_updates	-0.997 0.935 1e-06 33.5 13380 -0.00105 101
rollout/	 1.16e+03
ep_len_mean ep rew mean	1.10e+03
time/	
fps	120
iterations	1340
<pre> time_elapsed total timesteps</pre>	5682 686080
train/	
approx_kl	0.0061996523
clip_fraction	0
clip_range	0.2
<pre> entropy_loss explained variance</pre>	-1.03 0.897
learning rate	le-06
loss	123
n_updates	13390
! ' - ' - '	-0.00097 212
vatue_toss	
rollout/	
ep_len_mean	1.16e+03 1.97e+03
ep_rew_mean time/	1.97e+05
fps	120
iterations	1341
time_elapsed	5686
<pre> total_timesteps train/</pre>	686592
approx kl	 0.006371964
clip_fraction	0.0326
clip_range	0.2
entropy_loss	-1.02
<pre> explained_variance learning rate</pre>	0.439 1e-06
loss	322
n_updates	13400
policy_gradient_loss	
value_loss	806
rollout/	
ep_len_mean ep_rew_mean	1.16e+03 1.97e+03
ep_rew_mean time/	1.97e+05
fps	120
iterations	1342
time_elapsed	5691
<pre> total_timesteps train/</pre>	687104
approx kl	0.0042116963
clip_fraction	0.0529
clip_range	0.2
entropy_loss	-1.12 0.8
<pre> explained_variance learning_rate</pre>	0.8 1e-06
· ·	
loss	91.3
n_updates	91.3 13410
n_updates policy_gradient_loss	91.3 13410 -0.00287
n_updates policy_gradient_loss value_loss	91.3 13410 -0.00287
n_updates policy_gradient_loss value_loss	91.3 13410 -0.00287
n_updates policy_gradient_loss value_loss rollout/	91.3 13410 -0.00287 222
n_updates policy_gradient_loss value_loss rollout/ ep_len_mean	91.3 13410 -0.00287 222 1.16e+03
n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean	91.3 13410 -0.00287 222
n_updates policy_gradient_loss value_loss rollout/ ep_len_mean	91.3 13410 -0.00287 222 1.16e+03
n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations	91.3
n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed	91.3
n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps	91.3
n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps	91.3
n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps	91.3 13410 -0.00287 222

```
clip_range
                     0.2
   entropy_loss
                     | -1.02
   explained_variance | 0.839
   learning_rate
                     | 1e-06
   loss
                     | 74.1
             | 13420
   n updates
   policy_gradient_loss | -0.00642
   value_loss | 195
rollout/
   ep_len_mean
                       1.16e+03
  ep_rew_mean
                     | 1.98e+03
time/
                     120
  fps
                     | 1344
   iterations
   time elapsed
                    | 688128
  total timesteps
train/
  approx_kl
                     | 0.0024169663
   clip_fraction
                     | 0.00117
                    | 0.2
   clip_range
  entropy_loss | -0.942
explained_variance | 0.273
   learning_rate
                    | 1e-06
                    | 444
                     | 13430
   n updates
   policy_gradient_loss | -0.000408
   value loss | 793
                     | 1.16e+03
   ep len mean
  ep_rew_mean
                     1.98e+03
time/
                     120
  fps
  iterations
                     | 1345
                    | 5703
| 688640
  time_elapsed
  total_timesteps
                     | 0.0048070373
  approx_kl
  clip_fraction
                    | 0.015
                    | 0.2
   clip_range
                     | -1.08
   entropy_loss
   explained variance | 0.878
   learning_rate | 1e-06
                      | 47.5
   n updates
                     13440
   policy_gradient_loss | -0.00548
   value_loss | 144
                    1.16e+03
1.98e+03
  ep_len_mean
  ep_rew_mean
                     | 120
                    | 1346
  iterations
                   5707
   time_elapsed
  total_timesteps
                     | 689152
train/
                     0.0052083232
  approx kl
                    0.0043
   clip fraction
   clip_range
   entropy_loss
                     | -1.11
   explained_variance | 0.701
                     | 1e-06
   learning_rate
   loss
                     | 212
                     | 13450
   n_updates
   policy_gradient_loss | -0.00278
   value_loss | 397
rollout/
                     | 1.16e+03
  ep len mean
  ep_rew_mean
                     1.98e+03
time/
                     | 120
                     | 1347
  iterations
   time elapsed
                     | 5712
  total_timesteps
                      | 689664
train/
                      | 0.007139111 |
  approx_kl
```

```
clip_fraction
                      0.2
   clip_range
   entropy_loss
                      | -1.1
   explained_variance | 0.56
   learning_rate
                      | 1e-06
                     | 91.6
   n_updates | 13460
policy_gradient_loss | -0.00217
   value_loss | 235
rollout/
  ep len mean
                        1.16e+03
                      | 1.98e+03
  ep_rew_mean
time/
                      | 120
  fps
  iterations
                      1348
                     | 5717
  time elapsed
  total timesteps
                      690176
train/
                      | 0.008792301
  approx kl
   clip_fraction
                      0.0604
  clip_range
entropy_loss
                      0.2
                     -1.02
   explained variance | 0.823
                    | 1e-06
   learning_rate
                     | 224
                      | 13470
  n_updates
   policy_gradient_loss | -0.00674
   value_loss | 261
  ep_len_mean
                     | 1.16e+03
  ep_rew_mean
                      | 1.98e+03
time/
  fps
                      | 120
                      | 1349
  iterations
   time_elapsed
                     | 5721
  total_timesteps
                     | 690688
                      0.0040249266
  approx_kl
   clip_fraction
                      0.2
   clip range
   entropy loss
                      | -1.17
   explained variance | 0.941
   learning_rate
                      | 1e-06
   loss
                      55.9
   n_updates
                     | 13480
   policy_gradient_loss | -0.00136
   value_loss | 167
rollout/
  ep_len_mean
                      | 1.14e+03
  ep rew mean
                      | 1.95e+03
time/
  fps
                      | 120
   iterations
                      | 1350
   time elapsed
                      | 5725
                      | 691200
  total_timesteps
train/
                      0.0051316563
   approx_kl
   clip fraction
                     0.0377
   clip_range
                     0.2
   entropy_loss
                      | -1.06
   explained_variance | 0.805
   learning_rate
                      | 1e-06
                      98.6
   loss
                      | 13490
   n updates
   policy_gradient_loss | -0.00184
rollout/
  ep len mean
                      1.14e+03
                      | 1.95e+03
  ep_rew_mean
time/
                      | 120
  fps
   iterations
                      | 1351
                      | 5729
   time_elapsed
   total_timesteps
                      | 691712
train/
```

approx_kl	0.0076433225
clip_fraction	0.0215
clip_range	0.2
entropy_loss	-1.15
<pre> explained_variance</pre>	0.953
<pre> learning_rate</pre>	1e-06
loss	77.3
n updates	13500
:::	-0.00486 i
value loss	161
rollout/	l I
ep len mean	1.14e+03
ep rew mean	1.95e+03
time/	
fps	120
iterations	1352
time_elapsed	5734
total timesteps	692224
train/	032224
approx kl	0.0010775715
clip_fraction	0.0013773713
	0.00137
clip_range	0.2
entropy_loss	!
• • =	0.636
learning_rate	1e-06
loss	113
n_updates	13510
	0.000525
value_loss	222
rollout/	
ep_len_mean	1.14e+03
ep_rew_mean	1.94e+03
time/	
fps	120
iterations	1353
time_elapsed	5738
<pre> total_timesteps</pre>	692736
train/	
approx_kl	0.0022607076
<pre> clip_fraction</pre>	0.00371
<pre> clip_range</pre>	0.2
entropy_loss	-1.19
<pre> explained variance</pre>	0.766
CXPCdITICG_Variation	1e-06
learning_rate	
• • -	121
learning_rate	!
learning_rate loss n_updates	121 13520
learning_rate loss n_updates policy_gradient_loss	121 13520
learning_rate loss n_updates policy_gradient_loss	121 13520 0.000266
learning_rate loss n_updates policy_gradient_loss value_loss	121 13520 0.000266
learning_rate loss n_updates policy_gradient_loss	121 13520 0.000266
learning_rate loss n_updates policy_gradient_loss value_loss	121 13520 0.000266
<pre>learning_rate loss n_updates policy_gradient_loss value_loss rollout/</pre>	121
learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean	121
learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps	121
learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations	121
learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed	121
learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations	121
learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed	121
learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl	121
learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/	121 13520 0.000266 409 1.14e+03 1.94e+03 120 1354 5742 693248
learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl	121
learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction	121
learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss	121
learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss	121 13520 0.000266 409 1.14e+03 1.94e+03 120 1354 5742 693248 0.0020825346 0.000586 0.2 -1.17
learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance	121 13520 0.000266 409 1.14e+03 1.94e+03 120 1354 5742 693248 0.0020825346 0.000586 0.2 -1.17 0.857
learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n updates	121
learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n updates	121
learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss	121
learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss	121 13520 0.000266 409 1.14e+03 1.94e+03 120 1354 5742 693248 0.0020825346 0.000586 0.2 -1.17 0.857 1e-06 257 13530 0.000534 0.000534
learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss	121 13520 0.000266 409 1.14e+03 1.94e+03 120 1354 5742 693248 0.0020825346 0.000586 0.2 -1.17 0.857 1e-06 257 13530 0.000534 0.000534
learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss	121 13520 0.000266 409 1.14e+03 1.94e+03 120 1354 5742 693248 0.0020825346 0.000586 0.2 -1.17 0.857 1e-06 257 13530 0.000534 0.000534
learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss	121 13520 0.000266 409 1.14e+03 1.94e+03 120 1354 5742 693248 0.0020825346 0.000586 0.2 -1.17 0.857 1e-06 257 13530 0.000534 0.000534
learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss	121 13520 0.000266 409 1.14e+03 1.94e+03 120 1354 5742 693248 0.0020825346 0.000586 0.2 -1.17 0.857 1e-06 257 13530 0.000534 384 384
learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean	121 13520 0.000266 409 1.14e+03 1.94e+03 120 1354 5742 693248 0.000586 0.2 -1.17 0.857 1e-06 257 13530 0.000534 384 1.14e+03
learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean	121 13520 0.000266 409 1.14e+03 1.94e+03 120 1354 5742 693248 0.000586 0.2 -1.17 0.857 1e-06 257 13530 0.000534 384 1.14e+03
learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/	121 13520 0.000266 409 1.14e+03 1.94e+03 1.94e+03 1.17 0.857 1e-06 257 13530 0.000534 384 1.14e+03 1.94e+03 1.94e+03 1.94e+03 1.94e+03 1.94e+03 1.94e+03 1.94e+03 1.94e+03 1.000266 1.0
learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps	121 13520 0.000266 409 1.14e+03 1.94e+03 120 1354 5742 693248 0.0020825346 0.000586 0.2 -1.17 0.857 1e-06 257 13530 0.000534 384 1.14e+03 1.94e+03 1.94e+03 120 12
learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations	121 13520 0.000266 409 1.14e+03 1.94e+03 120 1354 5742 693248 0.0020825346 0.000586 0.2 -1.17 0.857 1e-06 257 13530 0.000534 384 1.14e+03 1.94e+03 1.94e+03 1.94e+03 1.94e+03 1.20 1355 1.95000000000000000000000000000000000000

```
train/
                      0.0020367564
   approx kl
   clip fraction
                      | 0
                      0.2
   clip_range
                      | -1.15
   entropy_loss
   explained_variance | 0.873
   learning_rate
                      | 1e-06
                      | 73.7
   n updates
                     | 13540
   policy_gradient_loss | -0.000239
   value_loss | 151
rollout/
   ep len mean
                        1.14e+03
                      | 1.94e+03
  ep rew mean
time/
                      | 120
  fps
   iterations
                      | 1356
   time_elapsed
                      | 5751
  total_timesteps
                      | 694272
train/
                      | 0.012096635
   approx kl
   clip_fraction
                      0.0563
   clip range
                      0.2
                      | -1.12
   entropy_loss
   explained_variance | 0.867
                      | 1e-06
   learning_rate
                      | 53.4
   loss
                      | 13550
   n_updates
   policy_gradient_loss | -0.00564
                      | 153
   value_loss
rollout/
                      | 1.14e+03
  ep_len_mean
   ep_rew_mean
                     | 1.94e+03
time/
  fps
                      | 120
                      | 1357
  iterations
                     | 5755
   time_elapsed
  total_timesteps
                      | 694784
train/
                      0.01576646
  approx kl
   clip_fraction
                      | 0.125
                      0.2
   clip range
   entropy_loss
                      | -1.11
   explained_variance | 0.872
   learning_rate
                      | 1e-06
   loss
                      | 53.7
   n_updates
                      | 13560
   policy_gradient_loss | -0.0106
   value loss
                      | 138
  ep_len_mean
                     | 1.15e+03
  ep_rew_mean
                      | 1.95e+03
time/
                      120
  fps
                      | 1358
   iterations
   time elapsed
                      | 5759
  total timesteps
                      | 695296
train/
                      | 0.0064136744
   approx_kl
   clip_fraction
                      0.00977
   clip_range
                      0.2
   entropy_loss
                      | -0.964
   explained_variance | 0.766
   learning_rate
                      | 1e-06
   loss
                      | 101
   n updates
                      | 13570
   policy_gradient_loss | -0.00355
   value loss
rollout/
  ep len mean
                      | 1.15e+03
  ep_rew_mean
                      | 1.94e+03
time/
                      | 120
  fps
   iterations
                      | 1359
                      | 5763
   time_elapsed
```

total_timesteps	695808
train/ approx_kl clip_fraction clip_range	0.011948696 0.0363 0.2
<pre> entropy_loss explained_variance loarning_rate</pre>	-1.14 0.875
learning_rate loss	1e-06 44.9
<pre> n_updates policy_gradient_loss </pre>	13580 -0.00483
value_loss	171
rollout/ ep_len_mean	1.15e+03
ep_rew_mean time/	1.94e+03
fps	120
<pre> iterations time elapsed</pre>	1360 5768
total_timesteps train/	696320
approx_kl	0.0032386025
<pre> clip_fraction clip range</pre>	0.0111 0.2
entropy_loss	-1.09
<pre> explained_variance learning_rate</pre>	0.537 1e-06
loss n updates	194 13590
policy_gradient_loss	0.00036
value_loss	757
rollout/	
ep_len_mean	1.15e+03
ep_rew_mean time/	1.94e+03
fps iterations	120 1361
time_elapsed	5772
<pre> total_timesteps train/</pre>	696832
approx_kl	0.004570052 0.0189
clip_fraction clip_range	0.2
<pre> entropy_loss explained_variance </pre>	-1.06 0.881
learning_rate	1e-06
loss n_updates	39.9 13600
<pre>policy_gradient_loss value loss</pre>	-0.000568 144
1 10100_1000	
rollout/	
ep_len_mean ep_rew_mean	1.15e+03 1.94e+03
time/	i
fps iterations	120 1362
<pre> time_elapsed total timesteps</pre>	5776 697344
train/	İ
approx_kl clip_fraction	0.001773 0
<pre> clip_range entropy_loss</pre>	0.2 -0.881
explained_variance	0.817
<pre> learning_rate loss</pre>	1e-06 71.1
n_updates	13610
<pre>policy_gradient_loss value_loss</pre>	-0.000262 214
rollout/	1 162.02
ep_len_mean ep_rew_mean	1.16e+03 1.95e+03
time/ fps	120
iterations	1363

```
time elapsed
                      | 5780
                        697856
  total_timesteps
train/
                      0.003743277
  approx_kl
  clip fraction
                      0.2
  clip_range
                      1 -1.08
  entropy loss
  explained_variance
                     | 0.886
                      l 1e-06
  learning_rate
                      | 84.2
  loss
                      | 13620
  n updates
  policy_gradient_loss | -0.000874
  value loss
rollout/
  ep len mean
                      1.95e+03
  ep rew mean
time/
                      | 120
  fps
  iterations
                      | 1364
                     | 5784
  time_elapsed
  total_timesteps
                     | 698368
train/
  approx kl
                      0.0020406991
                     0.00781
  clip_fraction
  clip range
                     0.2
  entropy_loss
                      | -1.13
  explained variance | 0.892
                      | 1e-06
  learning_rate
                      | 38.1
                      13630
  n updates
  policy gradient loss | -0.00154
  value_loss | 176
                      | 1.16e+03
  ep_len_mean
  ep_rew_mean
                      | 1.95e+03
time/
                      | 120
                      | 1365
  iterations
                      | 5789
  time_elapsed
  total_timesteps
                      1 698880
                      0.0032719611
  approx kl
  clip_fraction
                      0.00508
  clip range
                      0.2
  entropy_loss
                      | -1.06
  explained_variance | 0.798
  learning_rate
                      | 1e-06
                      | 114
  loss
  n updates
                      | 13640
  policy_gradient_loss | 0.0033
                      | 401
  value_loss
rollout/
                      | 1.16e+03
  ep_len_mean
  ep_rew_mean
                      | 1.95e+03
time/
                      120
  fps
                      | 1366
  iterations
  time elapsed
                      | 699392
  total_timesteps
train/
                      0.0050971513
  approx_kl
  clip_fraction
                      0.00273
  clip_range
                      0.2
  entropy_loss
                      | -1.14
  explained_variance | 0.375
  learning_rate
                      | 1e-06
  loss
                      | 613
                      13650
  n updates
  policy gradient loss | -0.00205
  value loss
                      | 1.16e+03
  ep len mean
                      | 1.95e+03
  ep_rew_mean
time/
                      | 120
  fps
```

iterations	1367
time_elapsed	5797
<pre> total_timesteps</pre>	699904
train/	
approx_kl	0.009461723
<pre> clip_fraction</pre>	0.107
clip_range	0.2
entropy_loss	-1.08
<pre> explained_variance</pre>	0.898
learning_rate	1e-06
loss	41
n_updates	13660
policy_gradient_loss	
value_loss	129
mallau+/	
rollout/	
ep_len_mean	1.17e+03
<pre> ep_rew_mean time/</pre>	1.976+05
fps	120
iterations	1368
time elapsed	5802
total timesteps	700416
train/	700110
approx kl	0.0066244407
clip_fraction	0.0244
clip range	0.0244
entropy_loss	-0.955
explained variance	0.902
learning rate	1e-06
loss	74
n updates	13670
policy_gradient_loss	-0.00451
	186
rollout/	
ep_len_mean	1.17e+03
ep_rew_mean	1.97e+03
time/	
fps	120
iterations	1369
time_elapsed	5806
total_timesteps	700928
train/	
approx_kl	0.0006771566
<pre> clip_fraction clip_range</pre>	0
	0.2 -1.15
entropy_loss	
<pre>entropy_loss explained_variance</pre>	0.0775
<pre> entropy_loss explained_variance learning_rate</pre>	0.0775 1e-06
entropy_loss explained_variance learning_rate loss	0.0775 1e-06 829
entropy_loss explained_variance learning_rate loss n_updates	0.0775 1e-06 829 13680
<pre>entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss</pre>	0.0775 1e-06 829 13680
<pre>entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss</pre>	0.0775 1e-06 829 13680
<pre>entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss</pre>	0.0775 1e-06 829 13680
<pre>entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss</pre>	0.0775 1e-06 829 13680
<pre>entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/</pre>	0.0775 1e-06 829 13680
entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss	0.0775
<pre>entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean</pre>	0.0775
entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean	0.0775
<pre>entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/</pre>	0.0775
<pre>entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps</pre>	0.0775
<pre>entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations</pre>	0.0775
entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/	0.0775
entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl	0.0775
entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction	0.0775
entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range	0.0775
entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss	0.0775
entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance	0.0775
entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate	0.0775
entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss	0.0775
entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates	0.0775
entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss	0.0775
entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates	0.0775
entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss	0.0775
entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss	0.0775
entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss	0.0775
entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean	0.0775
entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss	0.0775

fps	120
iterations	1371
<pre> time_elapsed total timesteps</pre>	5815 701952
train/	701932
approx_kl	0.006244815
clip_fraction	0.00488
<pre> clip_range entropy_loss</pre>	0.2 -1.13
explained variance	0.908
learning_rate	l 1e-06
loss	50.3
<pre> n_updates policy_gradient_loss</pre>	13700 -0.00258
value_loss	237
rollout/	I I
ep_len_mean	1.17e+03
ep_rew_mean	1.96e+03
time/ fps	
iterations	1372
time_elapsed	5819
total_timesteps	702464
train/ approx kl	
clip_fraction	0.00527
clip_range	0.2
<pre> entropy_loss explained variance</pre>	-1.1 0.589
learning rate	0.569
loss	55.8
n_updates	13710
<pre>policy_gradient_loss value_loss</pre>	0.00108 220
rollout/	 1.17e+03
<pre> ep_len_mean ep rew mean</pre>	1.17e+03 1.96e+03
time/	
fps	120
<pre> iterations time elapsed</pre>	1373 5823
total timesteps	702976
train/	į į
<pre> approx_kl clip_fraction</pre>	0.011539552 0.0539
clip_range	0.0559
entropy_loss	-1.07
· · -	0.706
<pre> learning_rate loss</pre>	1e-06 312
n_updates	13720
policy_gradient_loss	
value_loss	733
rollout/	
ep_len_mean	1.17e+03
ep_rew_mean time/	1.96e+03
fps	120
iterations	l 1374 l
time_elapsed total timestens	5828
<pre> time_elapsed total_timesteps train/</pre>	
total_timesteps train/ approx_kl	5828
total_timesteps train/ approx_kl clip_fraction	5828
total_timesteps train/ approx_kl clip_fraction clip_range	5828
<pre> total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance</pre>	5828
<pre> total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate</pre>	5828
<pre> total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss</pre>	5828
<pre> total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss</pre>	5828
<pre> total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss</pre>	5828
<pre> total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss</pre>	5828
<pre> total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss</pre>	5828
<pre>total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss</pre>	5828
<pre> total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss</pre>	5828

```
time/
                        120
   fps
   iterations
                        1375
   time_elapsed
                        5832
                      704000
   total_timesteps
train/
                        0.002397928
   approx kl
   clip_fraction
                      | 0.00176
   clip_range
                      0.2
   entropy_loss
                      | -1.04
   explained_variance | 0.722
                      | 1e-06
   learning_rate
   loss
                      | 136
                      | 13740
   n_updates
   policy_gradient_loss | 0.00217
   value_loss
                      | 364
rollout/
  ep_len_mean
                        1.17e+03
                     | 1.96e+03
  ep_rew_mean
time/
                      | 120
  fps
                      1376
  iterations
                     | 5836
   time elapsed
  total_timesteps
                      704512
train/
                      | 0.005249887
  approx_kl
   clip fraction
                      0.0332
  clip_range
                      0.2
   entropy loss
                      | -1.05
   explained_variance | 0.806
   learning_rate
                      | 1e-06
   loss
                      l 189
   n updates
                      | 13750
   policy_gradient_loss | -0.00183
   value loss
  ep_len_mean
                      | 1.17e+03
  ep_rew_mean
                     | 1.97e+03
time/
  fps
                      i 120
  iterations
                      | 1377
                      | 5840
   time elapsed
   total_timesteps
                      705024
train/
                      0.00096422667
   approx kl
                     0.00176
   clip_fraction
   clip_range
                      0.2
                      | -1.15
   entropy_loss
   explained_variance | 0.783
                     | 1e-06
   learning_rate
                      | 157
   loss
                      13760
   n updates
   policy_gradient_loss | 0.000409
   value loss
                      | 446
rollout/
                      | 1.13e+03
   ep len mean
   ep rew mean
                      | 1.93e+03
time/
                      | 120
  fps
   iterations
                      | 1378
   time_elapsed
                      | 5845
  total_timesteps
                      | 705536
train/
   approx kl
                      0.00067746255
   clip_fraction
                      0.2
   clip range
   entropy_loss
                      | -1.08
   explained variance
                     0.883
                      l 1e-06
   learning_rate
                      | 29.5
                      | 13770
   n updates
   policy gradient loss | 0.00172
   value_loss
rollout/
                      | 1.13e+03
  ep_len_mean
```

```
ep rew mean
                        | 1.93e+03
 time/
                         120
    fps
                        | 1379
    iterations
                        | 5849
    time elapsed
    total_timesteps
                        706048
                       0.0018966374
    approx kl
    clip fraction
                      0.000586
    clip_range
entropy_loss
                      | 0.2
    entropy_loss | -0.874
explained_variance | 0.811
    learning_rate
                       | 1e-06
                        | 172
    loss
    n updates
                       | 13780
    policy_gradient_loss | 0.00036
    value loss
 rollout/
    ep len mean
                        | 1.13e+03
                        | 1.93e+03
    ep_rew_mean
 time/
                        120
    fps
                      | 1380
    iterations
    time_elapsed
                      | 5853
    total timesteps
                       | 706560
 train/
    approx kl
                       0.0023038085
                      0.00937
    clip_fraction
    clip_range
entropy_loss
                      | 0.2
| -1.11
    explained variance | 0.781
    learning_rate | 1e-06
    loss
                       | 64.4
                        | 13790
    n_updates
    policy_gradient_loss | 0.00136
                | 198
    value_loss
 rollout/
                      | 1.13e+03
    ep len mean
    ep rew mean
                        | 1.93e+03
 time/
                       | 120
    fps
                      | 1381
    iterations
                      | 5857
| 707072
    time_elapsed
    total timesteps
 train/
                       | 0.0048205284
    approx kl
                       | 0.0162
    clip_fraction
                       0.2
    clip range
                       | -0.964
    entropy_loss
    explained variance | 0.851
                        | 1e-06
    learning_rate
                      | 13800
    n_updates
    policy_gradient_loss | -0.0037
    value_loss | 256
 rollout/
                      1.13e+03
1.93e+03
    ep len mean
    ep rew mean
 time/
                        120
   fps
    iterations
                       | 1382
    time elapsed
                      | 5862
    total_timesteps
                      | 707584
 train/
                       0.003942716
    approx_kl
    clip fraction
                      | 0.0113
    clip range
                      0.2
    entropy loss
                        -1.08
    explained_variance | 0.522
    learning_rate
                       le-06
                        | 397
    loss
                        | 13810
    n_updates
    policy_gradient_loss | -0.00145
    value loss | 835
| rollout/
```

```
ep len mean
                      | 1.13e+03
   ep_rew_mean
                      | 1.93e+03
time/
                      | 120
  fps
                      | 1383
   iterations
   time_elapsed
                      | 5866
  total timesteps
                     708096
train/
  approx kl
                     0.0022187773
   clip_fraction
                     0.00234
   clip_range
                     0.2
   entropy_loss
                     | -1.09
   explained variance | 0.817
   learning_rate
                     | 1e-06
   loss
                     13820
   n_updates
   policy gradient loss | 0.00119
   value_loss | 103
rollout/
                      | 1.14e+03
   ep_len_mean
  ep_rew_mean
                    | 1.94e+03
time/
                     | 120
                    | 1384
  iterations
                   | 5870
   time_elapsed
  total_timesteps
                     708608
train/
                     0.007884037
  approx_kl
                    0.0121
   clip fraction
  clip_range
                     0.2
  entropy_loss
                    | -1.13
   explained_variance | 0.809
   learning_rate | 1e-06
                     95.8
   loss
             | 13830
   n updates
   policy_gradient_loss | -0.00387
   value_loss | 258
rollout/
   ep len mean
                     | 1.14e+03
  ep_rew_mean
                     | 1.94e+03
time/
  fps
                      120
                     | 1385
  iterations
   time elapsed
                    5874
  total_timesteps
                    | 709120
train/
                     | 0.0035412312
  approx_kl
                     0.0084
   clip_fraction
   clip_range
                    | 0.2
  entropy_loss | -1.2
explained_variance | 0.73
                     | 1e-06
   learning_rate
                     | 319
  loss
   n updates
                     | 13840
   policy_gradient_loss | -0.00389
   value loss
rollout/
  ep_len_mean
                     | 1.14e+03
                    | 1.94e+03
  ep_rew_mean
time/
                      | 120
  fps
  iterations
                     | 1386
                    | 5879
   time_elapsed
   total_timesteps
                     | 709632
train/
  approx kl
                     0.004824481
                    | 0.0234
   clip_fraction
   clip range
                     0.2
                     | -1.03
   entropy_loss
   explained variance | 0.789
                     | 1e-06
   learning_rate
                      | 84.6
   loss
   n updates
                     | 13850
   policy_gradient_loss | -0.00287
                      | 197
   value_loss
```

```
rollout/
                        1.14e+03
  ep len mean
  ep_rew_mean
                      | 1.94e+03
time/
                       120
  fps
                        1387
  iterations
  time elapsed
                        5884
                      710144
  total_timesteps
                      | 0.003471448
  approx_kl
  clip_fraction
                      0.00547
  clip_range
                      0.2
  entropy loss
                      | -1.16
  explained variance | 0.555
  learning rate
                      l 1e-06
                      1 204
  loss
                      | 13860
  n updates
  policy_gradient_loss | 0.00105
  value loss | 494
rollout/
  ep len mean
                      | 1.14e+03
  ep_rew_mean
                      | 1.94e+03
time/
                      | 120
  fps
                      | 1388
  iterations
                      | 5889
  time_elapsed
  total_timesteps
                      710656
train/
                      0.0036738527
  approx_kl
                     0.0215
  clip_fraction
  clip_range
                     0.2
  entropy_loss | -1.23
explained_variance | 0.727
                      l 1e-06
  learning_rate
                      | 98
                      | 13870
  n updates
  policy_gradient_loss | -0.000463
                      | 317
  value_loss
rollout/
                      | 1.14e+03
  ep len mean
  ep rew mean
                      | 1.94e+03
time/
                      | 120
  fps
                      1389
  iterations
  time_elapsed
                     | 5893
  total timesteps
                      711168
train/
  approx kl
                      0.0039189886
                      0.0168
  clip_fraction
  clip_range
entropy_loss
                      0.2
                      | -1.42
  explained variance | 0.882
                      | 1e-06
  learning_rate
  loss
                      | 59.9
                      | 13880
  n_updates
  policy_gradient_loss | 7.83e-05
  value_loss
                      | 1.14e+03
  ep_len_mean
  ep_rew_mean
                      1.94e+03
time/
  fps
                      | 120
                        1390
  iterations
  time elapsed
                        5897
  total_timesteps
                      | 711680
                      0.0019384464
  approx_kl
  clip fraction
  clip_range
                      0.2
  entropy loss
                      | -1.58
  explained_variance
                      0.311
  learning_rate
                      | 1e-06
                      1 15.5
  n_updates
                      | 13890
  policy_gradient_loss | -0.00106
  value loss | 51.9
```

```
rollout/
  ep len mean
                      1.14e+03
  ep_rew_mean
                     1.94e+03
time/
  fps
                     120
  iterations
                      1391
  time_elapsed
                     5901
  total_timesteps
                    712192
train/
                     0.007490972
  approx kl
  clip_fraction
                     0.018
  clip range
                     0.2
  entropy_loss
                     | -1.6
  explained variance | -2.05
  learning_rate
                     l 1e-06
  loss
                     2.15
  n_updates
                     | 13900
  policy_gradient_loss | -0.00322
  value_loss | 13.9
rollout/
                     | 1.14e+03
  ep_len_mean
  ep_rew_mean
                    | 1.94e+03
time/
                     120
  fps
                     | 1392
  iterations
  time elapsed
                    | 5906
                    712704
  total_timesteps
                     0.0036286642
  approx kl
                    0.0043
  clip fraction
                    0.2
  clip_range
                     | -1.62
  entropy loss
  explained_variance | -2.68
  learning_rate
                     l 1e-06
```

policy_gradient_loss | -0.00211
value_loss | 7.62

1.11

| 13910

loss

n_updates

rollout/	 	
ep_len_mean	1.14e+03	
ep_rew_mean	1.94e+03	
time/		
fps	120	
iterations	1393	
time_elapsed	5910	
total_timesteps	713216	
train/		
approx_kl	0.004246409	
clip_fraction	0.00859	
clip_range	0.2	
entropy_loss	-1.62	
<pre> explained_variance</pre>	-1.93	
learning_rate	1e-06	
loss	0.275	
n_updates	13920	
<pre>policy_gradient_loss</pre>	-0.00342	
value loss	3.34	

.....

-			-
ı	rollout/	1	ĺ
ĺ	ep_len_mean	1.14e+03	ĺ
	ep_rew_mean	1.94e+03	
	time/		
	fps	120	
	iterations	1394	
	time_elapsed	5914	
	total_timesteps	713728	
	train/		
	approx_kl	0.001913586	
	clip_fraction	0.000586	
	clip_range	0.2	
	entropy_loss	-1.63	
	explained_variance	-0.871	
	learning_rate	1e-06	
	loss	0.238	
	n_updates	13930	
	<pre>policy_gradient_loss</pre>	-0.00258	
	value_loss	2.07	

rollout/ ep_len_mean | 1.14e+03 ep_rew_mean 1.94e+03 time/ fps | 120 | 1395 iterations time elapsed | 5918 total_timesteps | 714240 train/ | 0.000790983 approx_kl clip_fraction | 0 clip_range
entropy_loss | 0.2 entropy_loss | -1.63 explained_variance | -1.93 | 1e-06 learning_rate | 0.339 loss n updates | 13940 policy_gradient_loss | -0.000807 value_loss | 1.95 ep_len_mean ep_rew_mean | 1.14e+03 1.94e+03 time/ | 120 fps iterations | 1396 time_elapsed | 5922 | 714752 total timesteps train/ 0.0008463557 approx_kl | 0 clip_fraction 0.2 clip_range entropy_loss | -1.62 explained variance | -1.09 learning_rate | 1e-06 0.238 | 13950 n_updates policy_gradient_loss | -0.00113 value_loss | 1.2 | 1.14e+03 ep_len_mean ep_rew_mean | 1.94e+03 time/ | 120 fps | 1397 iterations time_elapsed | 5927 total_timesteps | 715264 0.0015838002 0.00156 0.2 approx kl clip_fraction clip range entropy_loss | -1.63 explained_variance | -0.947 learning_rate | 1e-06 loss 0.154 | 13960 n_updates policy gradient loss | -0.00217 value loss 0.923 rollout/ ep_len_mean | 1.14e+03 ep_rew_mean | 1.94e+03 time/ | 120 fps | 1398 iterations 5931 time elapsed total_timesteps | 715776 train/

| 0.0012096704

| 0

| 0.2 | -1.66 | -1

| 1e-06

0.151

| 13970

approx_kl
clip_fraction

loss n updates

clip_range entropy_loss

explained_variance

policy_gradient_loss | -0.00129

learning_rate

value_loss	0.877
rollout/ ep len mean	 1.14e+03
ep rew mean	1.94e+03
time/	
fps	120
iterations	1399
<pre> time_elapsed total timesteps</pre>	5935 716288
train/	/10200
approx_kl	0.00014881475
clip_fraction	0
<pre> clip_range entropy_loss</pre>	0.2 -1.65
explained variance	-0.379
learning_rate	le-06
loss	0.107
n_updates	13980
<pre>policy_gradient_loss value loss</pre>	-0.000153 0.463
'vatac_toss	
rollout/	
ep_len_mean ep rew mean	1.14e+03 1.94e+03
time/	1.540.05
fps	120
iterations	1400
time_elapsed	5939
<pre> total_timesteps train/</pre>	716800
approx kl	0.0014637442
clip_fraction	j 0
clip_range	0.2
<pre> entropy_loss explained variance</pre>	-1.66 -0.342
learning_rate	1e-06
loss	0.113
n_updates	13990
policy_gradient_loss	-0.00145
value_loss	0.433
rollout/	
ep_len_mean	1.14e+03
ep_rew_mean time/	1.94e+03
fps	120
iterations	1401
time_elapsed	5943
<pre> total_timesteps train/</pre>	717312
approx_kl	 0.000963783
clip_fraction	j 0
clip_range	0.2
entropy_loss	-1.68
<pre> explained_variance learning rate</pre>	-0.165 1e-06
loss	0.146
n_updates	14000
policy_gradient_loss	
value_loss	0.477
rollout/	
ep_len_mean	1.14e+03
ep_rew_mean time/	1.94e+03
fps	120
iterations	1402
time_elapsed	5948
total timesteps	717824

rol	llout/	
	ep_len_mean	1.14e+03
	ep_rew_mean	1.94e+03
tin	ne/	
	fps	120
	iterations	1402
	time_elapsed	5948
	total_timesteps	717824
tra	ain/	
	approx_kl	0.00032381713
	clip_fraction	0
	clip_range	0.2
	entropy_loss	-1.69
	explained_variance	-0.238
	learning_rate	1e-06
	loss	0.15
	n_updates	14010

policy_gradient_loss value_loss	-0.000737 0.424
rollout/	
ep_len_mean	1.14e+03
ep_rew_mean	1.94e+03
time/	
fps	120
iterations time elapsed	1403 5952
total timesteps	718336
train/	/ 10550
approx kl	0.0005104068
clip_fraction	0
	0.2
entropy_loss	-1.69
<pre> explained_variance </pre>	-0.218
learning_rate	1e-06
loss	0.202
n_updates	14020
1 1 1 1 1	-0.000769
vatue_toss	
rollout/	1
ep_len_mean	1.22e+03
ep_rew_mean	1.96e+03
time/	120
fps iterations	120 1404
time elapsed	5956
total timesteps	718848
train/	
approx kl	0.00036779873
clip_fraction	0
clip_range	0.2
entropy_loss	-1.69
• • •	-0.0489
<pre> learning_rate loss </pre>	1e-06 0.129
n updates	14030
_ : _ : :	-0.000621
value_loss	0.364
rollout/	
ep len mean	1.22e+03
ep rew mean	1.96e+03
time/	į
fps	120
iterations	1405
time_elapsed	5960
<pre> total_timesteps train/ </pre>	719360
approx kl	 0.0018309669
clip fraction	0.0119
clip range	0.2
entropy_loss	-1.16
explained_variance	0.872
learning_rate	1e-06
loss	67.1
n_updates	14040
policy_gradient_loss	-0.00034
value_loss	232
rollout/	
ep_len_mean	1.23e+03
ep_rew_mean	1.96e+03
time/	
fps	120 1406
iterations	

time_elapsed total_timesteps

ann/
approx_kl
clip_fraction
clip_range
entropy_loss
explained_variance
learning_rate

| train/

loss

5964 719872

0 0.2 | -1.07 0.773 | 1e-06 | 69.3

0.0010013256

n updates	14050
policy_gradient_loss	
value_loss	121
rollout/	
<pre> ep_len_mean ep rew mean</pre>	1.23e+03 1.96e+03
time/	
fps	120
<pre> iterations time elapsed</pre>	1407 5970
total_timesteps	720384
train/	
approx_kl clip fraction	0.0014484979 0
clip_range	0.2
entropy_loss	-1.03
<pre> explained_variance learning rate</pre>	0.596 1e-06
loss	332
	14060
<pre>policy_gradient_loss value loss</pre>	-0.00191 594
L rollout/	
rollout/ ep len mean	
ep_rew_mean	1.96e+03
time/ fps	
iterations	1408
time_elapsed	5974
<pre> total_timesteps train/</pre>	720896
approx kl	
clip_fraction	0.00937
clip_range entropy_loss	0.2 -0.978
explained_variance	0.772
learning_rate	l 1e-06
loss n updates	40.4 14070
policy_gradient_loss	-0.000444
value_loss	133
rollout/	
ep_len_mean ep rew mean	1.23e+03 1.97e+03
time/	1.576.05
fps	120
iterations time elapsed	1409 5978
total_timesteps	721408
train/	
approx_kl clip_fraction	0.0027264757 0.0109
clip_range	0.2
<pre> entropy_loss explained variance</pre>	-0.921 0.908
learning_rate	1e-06
loss	51.3
<pre> n_updates policy_gradient_loss </pre>	14080 -0.000395
value_loss	150
rollout/	
ep_len_mean	1.22e+03
ep_rew_mean time/	1.96e+03
fps	120
iterations	1410
<pre> time_elapsed total timesteps</pre>	5982 721920
train/	
approx_kl	0.0005850281
<pre> clip_fraction clip_range</pre>	0.000195 0.2
entropy_loss	-0.942
explained_variance	0.743
learning_rate	1e-06

loss n_updates policy_gradient_loss value_loss	152
rollout/	
ep_len_mean	1.22e+03
ep_rew_mean	1.96e+03
time/	
fps	120
iterations	1411
time_elapsed	5986
total_timesteps	722432
train/	İ
approx_kl	0.0010990779
clip_fraction	0.000195
clip_range	0.2
entropy_loss	-0.939
explained variance	0.405
learning_rate	1e-06
loss	I 345 I
n updates	i 14100 i
policy gradient loss	-0.000813
value loss	653
	, I
rollout/	I
ep_len_mean	I
ep_ten_mean	1.22e+03
ep_rew_mean time/	1.500.05
time/ fps	
ips iterations	120 1412
!	!
time_elapsed	5990
total_timesteps	722944
train/	
approx_kl	0.0037475913
clip_fraction	0.00273
clip_range	0.2
entropy_loss	-0.841
• • =	-2.74
learning_rate	1e-06
loss	3.64
n updates	14110
<pre>policy_gradient_loss</pre>	-2e-05
value_loss	144
rollout/	
ep len mean	1.23e+03
ep_rew_mean	1.96e+03
time/	i i
fps	i 120 i
iterations	1413
time elapsed	5995
total timesteps	723456
train/	, - :
approx kl	 0.008521131
clip_fraction	0.008321131
clip_rraction clip range	0.039
entropy_loss	0.2
entropy_toss explained_variance	0.645
learning_rate	1e-06
loss	70.4
. n unatec	l 14120 l
n_updates	
policy gradient loss	-0.00242
policy gradient loss	-0.00242
policy_gradient_loss value_loss	-0.00242
policy_gradient_loss value_loss rollout/	-0.00242
policy_gradient_loss value_loss rollout/ ep_len_mean	-0.00242
policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean	-0.00242
policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/	-0.00242
policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps	-0.00242
policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations	-0.00242
policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed	-0.00242
policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations	-0.00242
policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed	-0.00242
policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps	-0.00242
policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl	-0.00242
policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction	-0.00242
policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range	-0.00242
policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction	-0.00242

<pre>learning_rate loss n_updates policy_gradient_loss value_loss</pre>	1e-06 193 14130 -0.000375 444
1 17 /	
rollout/	
<pre> ep_len_mean ep rew mean</pre>	1.23e+03
time/	1.500105
fps	120
iterations	1 1415
time elapsed	6003
total_timesteps	724480
train/	
approx_kl	0.00010854297
clip_fraction	0
clip_range	0.2
1 13=	-0.899
explained_variance	0.928
learning_rate loss	1e-06 74.8
	14140
policy_gradient_loss	
	178
"""	
rollout/	l I
ep_len_mean	1.24e+03
ep_rew_mean	1.97e+03
time/	
fps	120
iterations	1416
time_elapsed	6007
total_timesteps	724992
train/	 0.006746358
approx_kl clip_fraction	0.0307
clip_rraction	0.0307
	-0.851
explained variance	0.796
learning rate	l 1e-06
loss	157
n_updates	14150
policy_gradient_loss	0.00178
value_loss	351
rollout/	
ep len mean	
ep_rew_mean	1.97e+03
time/	
fps	120
iterations	1417
time_elapsed	6011
<pre> total_timesteps</pre>	725504
train/	
approx_kl	0.0010562937
clip_fraction	0.00332
clip_range	0.2
	-0.933
<pre> explained_variance learning_rate</pre>	0.528 1e-06
loss	173
n updates	14160
policy_gradient_loss	
	708
rollout/	l l
	! !
ep_len_mean	1.23e+03
ep_rew_mean	1.23e+03 1.96e+03
ep_rew_mean time/	1.96e+03
ep_rew_mean time/ fps	1.96e+03
<pre> ep_rew_mean time/ fps iterations</pre>	1.96e+03 120 1418
<pre> ep_rew_mean time/ fps iterations time_elapsed</pre>	1.96e+03
<pre> ep_rew_mean time/ fps iterations time_elapsed total_timesteps</pre>	1.96e+03 120 1418
<pre> ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/</pre>	1.96e+03 120 1418 6015 726016
<pre> ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl</pre>	1.96e+03
<pre> ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/</pre>	1.96e+03
<pre> ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction</pre>	1.96e+03

```
explained variance
                     0.922
  learning_rate
                      | 1e-06
                      124
  loss
                      | 14170
  n_updates
  policy_gradient_loss | -0.000429
                 | 220
  value loss
                       1.21e+03
  ep_len_mean
  ep_rew_mean
                      | 1.93e+03
time/
  fps
                      | 120
  iterations
                      | 1419
                    | 6020
| 726528
  time elapsed
  total timesteps
train/
                      | 0.00020969764
  approx_kl
  clip fraction
                      0.2
  clip_range
                      | -0.885
  entropy_loss
  explained_variance | 0.862
                    | 1e-06
  learning_rate
                      | 116
  n updates
                     | 14180
  policy_gradient_loss | 0.00189
  value loss | 403
rollout/
  ep len mean
                      | 1.2e+03
                      | 1.92e+03
  ep_rew_mean
                      | 120
  fps
  iterations
                      | 1420
                     | 6024
  time elapsed
  total_timesteps
                    727040
train/
  approx_kl
                      | 0.00078263634
                     0.00566
  clip_fraction
                     | 0.2
  clip_range
                     | -0.881
  entropy_loss
  explained_variance | 0.406
                      | 1e-06
  learning_rate
                      | 502
                      | 14190
  n updates
  policy_gradient_loss | -0.0016
  value loss | 1.01e+03
rollout/
                      | 1.19e+03
  ep_len_mean
  ep_rew_mean
                    | 1.89e+03
time/
                      | 120
  fps
  iterations
                     | 1421
  time_elapsed
                    | 6028
                     | 727552
  total_timesteps
train/
                      0.0003562196
  approx kl
  clip_fraction
                      | 0
  clip_range
                      0.2
  entropy_loss
                      | -0.89
  explained variance | 0.585
  learning_rate
                      | 1e-06
  loss
                      | 281
                      | 14200
  n_updates
  policy_gradient_loss | 0.000442
                      | 484
  value_loss
                     | 1.19e+03
  ep_len_mean
                      | 1.89e+03
  ep rew mean
time/
                      | 120
  fps
                      | 1422
  iterations
                      | 6032
  time elapsed
  total_timesteps
                      | 728064
train/
                      | 0.0008117156
  approx_kl
  clip fraction
                      | 0.00176
  clip_range
                      0.2
```

```
entropy_loss
                      | -0.941
  explained_variance | 0.643
  learning_rate | 1e-06
                      | 358
  n updates
                      | 14210
  policy_gradient_loss | -0.000139
  value loss | 634
  ep len mean
                      | 1.18e+03
  ep_rew_mean
                     | 1.88e+03
time/
                      | 120
  fps
                      1423
  iterations
  time_elapsed
                      | 6036
  total timesteps
                      728576
train/
  approx kl
                      0.0006242329
  clip_fraction
  clip range
                      0.2
  entropy_loss
                      | -0.877
  explained_variance | 0.845
                      | 1e-06
  learning_rate
                      | 94.5
                      | 14220
  n_updates
  policy gradient loss | -0.00109
  value_loss | 241
                      | 1.18e+03
  ep len mean
  ep rew mean
                     | 1.88e+03
time/
                      | 120
  fps
                      | 1424
  iterations
  time elapsed
                    | 6041
                     | 729088
  total_timesteps
train/
                      | 0.00067364913
  approx_kl
                    | 0.00156
  clip_fraction
  clip_range
                     0.2
  entropy loss
                      | -0.893
  explained_variance | 0.59
  learning_rate
                      | 1e-06
                      | 776
  loss
  n_updates
                      | 14230
  policy_gradient_loss | -0.00154
  value loss
                      | 789
rollout/
                      | 1.18e+03
  ep_len_mean
  ep_rew_mean
                      | 1.88e+03
time/
                      120
                    | 1425
  iterations
  time elapsed
                     | 6045
  total_timesteps
                      | 729600
train/
                     0.0008690426
  approx_kl
  clip fraction
  clip_range
                      0.2
  entropy loss
                     | -0.907
  explained_variance | 0.895
  learning_rate
                      | 1e-06
                      | 86.3
  loss
  n updates
                      | 14240
  policy_gradient_loss | -0.000417
rollout/
  ep len mean
                       1.14e+03
  ep rew mean
                      | 1.83e+03
time/
                      | 120
  fps
                      | 1426
  iterations
  time_elapsed
                      | 6050
  total_timesteps
                      | 730112
train/
  approx kl
                      | 0.0038935295
  clip_fraction
```

```
clip_range
                      0.2
                      | -0.92
  entropy_loss
  explained variance | 0.916
  learning_rate
                      | 1e-06
  loss
                      | 14250
  n updates
  policy_gradient_loss | -0.00415
  value_loss | 203
rollout/
                       1.14e+03
  ep_len_mean
  ep rew mean
                      | 1.83e+03
time/
                      120
  fps
  iterations
                     | 1427
  time elapsed
                     6054
                    | 730624
  total timesteps
train/
                      0.0005718551
  approx_kl
  clip_fraction
                     0.00156
                     0.2
  clip_range
  entropy_loss
                     | -0.856
  explained_variance | 0.618
  learning_rate
                     | 1e-06
                     | 286
                     | 14260
  n updates
  policy_gradient_loss | 0.00199
  value loss
rollout/
                      | 1.14e+03
  ep len mean
  ep_rew_mean
                     1.84e+03
time/
                      120
 fps
  iterations
                     | 1428
                    | 6058
| 731136
  time_elapsed
  total_timesteps
                     | 0.0018607853
  approx_kl
  clip_fraction
                     | 0.2
  clip_range
                      | -0.934
  entropy_loss
  explained_variance | 0.918
  learning_rate | 1e-06
                      | 64.6
  n updates
  policy_gradient_loss | -0.00211
  value_loss | 151
                    | 1.14e+03
  ep len mean
  ep_rew_mean
                     | 1.84e+03
                     | 120
                    | 1429
  iterations
  time_elapsed
                     | 6063
  total_timesteps
                      | 731648
train/
                      0.0009796377
  approx kl
  clip fraction
  clip_range
                     0.2
                     | -0.989
  entropy_loss
  explained_variance | 0.534
  learning_rate
                      | 1e-06
  loss
                      | 14280
  n_updates
  policy_gradient_loss | 0.000103
  value_loss
                      | 743
rollout/
                      | 1.14e+03
  ep len mean
  ep_rew_mean
                     1.84e+03
time/
                      | 120
                      | 1430
  iterations
                      | 6067
  time elapsed
  total_timesteps
                      | 732160
train/
                      0.0017671515
  approx_kl
```

```
clip_fraction
                      0.2
   clip_range
                      | -0.948
   entropy_loss
   explained_variance | 0.879
   learning_rate
                      | 1e-06
                      | 28.9
                     | 14290
   n updates
   policy_gradient_loss | -0.000617
   value loss | 147
rollout/
  ep len mean
                       1.14e+03
                      | 1.83e+03
  ep_rew_mean
time/
                      1 120
  fps
  iterations
                      1431
                    | 6071
  time elapsed
   total timesteps
                      732672
train/
  approx kl
                      0.0020630425
   clip_fraction
  clip range
                      0.2
   entropy_loss
                      | -0.882
   explained variance | 0.932
                      | 1e-06
   learning_rate
                      | 77.7
                      | 14300
  n_updates
   policy_gradient_loss | -0.00157
   value_loss
              | 192
  ep_len_mean
                     | 1.14e+03
  ep_rew_mean
                      | 1.83e+03
time/
  fps
                      | 120
                      | 1432
  iterations
   time_elapsed
                     | 6075
  total_timesteps
                     | 733184
                      | 0.0031935107
  approx_kl
   clip fraction
                      0.00215
                     0.2
   clip range
   entropy loss
                     | -0.821
   explained variance | 0.531
   learning_rate
                      | 1e-06
  loss
   n_updates
                      | 14310
   policy_gradient_loss | -0.00266
                     | 930
   value_loss
rollout/
  ep_len_mean
                      | 1.13e+03
  ep rew mean
                      | 1.83e+03
time/
  fps
                      | 120
                      | 1433
   iterations
   time elapsed
                      | 6080
  total_timesteps
                      | 733696
train/
                      0.002319451
   approx_kl
   clip fraction
                     0.00469
   clip_range
                     0.2
                      -0.871
   entropy_loss
   explained_variance | 0.728
   learning_rate
                      | 1e-06
   loss
                      | 60
                       14320
   n updates
   policy_gradient_loss | 0.00137
rollout/
  ep len mean
                      1.13e+03
                      | 1.82e+03
  ep_rew_mean
time/
                      | 120
                      | 1434
   iterations
                      | 6084
  time_elapsed
   total timesteps
                      | 734208
train/
```

approx kl	0.00059692864
clip fraction	i 0 i
clip range	0.2
	-0.986
explained_variance	0.75
learning_rate	1e-06
loss	195
n_updates	14330
<pre>policy_gradient_loss </pre>	-0.000493
value_loss	497
rollout/	
ep len mean	1.13e+03
ep rew mean	1.82e+03
time/	
fps	120
iterations	1435
time elapsed	6088
	'
total_timesteps	734720
train/	0 0031050035
approx_kl	0.0021958025
clip_fraction	0.000977
clip_range	0.2
entropy_loss	-0.851
<pre> explained_variance </pre>	0.631
learning_rate	1e-06
loss	282
n updates	14340
	-0.00165
value loss	585
rollout/	l I
ep_len_mean	1.13e+03
ep rew mean	1.82e+03
time/	1 1.020105
: :	120
fps	
iterations	1436
time_elapsed	6092
total_timesteps	735232
train/	
approx_kl	0.0023191115
clip_fraction	0
clip_range	0.2
entropy_loss	-0.885
<pre> explained_variance </pre>	0.587
learning_rate	1e-06
loss	365
n_updates	14350
<pre>policy_gradient_loss </pre>	-0.00264
value_loss	640
rollout/	
ep_len_mean	1.13e+03
ep rew mean	1.82e+03
time/	i
fps	1 120
iterations	1437
time elapsed	6096
total timesteps	735744
train/	155144
approx kl	 0.0056778584
	'
clip_fraction	0 0.2
clip_range	
entropy_loss	-0.909
	0.756
learning_rate	1e-06
loss	40.7
	14360
	-0.00341
	153
ep_len_mean	1.13e+03
ep_rew_mean	1.82e+03
time/	
fps	120
iterations	1438
time_elapsed	6101
total_timesteps	736256

```
train/
                       0.002345991
   approx kl
   clip fraction
                      0.000586
                      0.2
   clip_range
                      1 -0.964
   entropy_loss
   explained_variance | 0.563
                      l 1e-06
   learning_rate
                       | 104
                      14370
   n updates
   policy_gradient_loss | 0.000315
   value_loss | 445
rollout/
                        1.13e+03
   ep len mean
                      | 1.82e+03
   ep rew mean
time/
                      | 120
  fps
   iterations
                      | 1439
   time_elapsed
                      | 6105
  total_timesteps
                      | 736768
train/
                      | 0.0008274878
   approx kl
                      0.000977
   clip_fraction
   clip range
                      0.2
                      | -0.886
   entropy_loss
   explained variance | 0.869
   learning_rate
                      | 1e-06
   loss
                      | 14380
   n_updates
   policy_gradient_loss | -0.00104
   value_loss
                      | 139
rollout/
                       | 1.14e+03
  ep_len_mean
   ep_rew_mean
                     | 1.82e+03
time/
  fps
                      | 120
                      | 1440
  iterations
                     | 6109
   time_elapsed
  total_timesteps
                      | 737280
train/
                       0.009097692
  approx kl
   clip fraction
                      | 0.0104
                      0.2
   clip range
  entropy_loss
                      | -0.909
   explained variance | 0.786
   learning_rate
                      | 1e-06
                       90.8
   loss
   n_updates
                       | 14390
   policy_gradient_loss | -0.00701
   value loss
  ep_len_mean
                     | 1.13e+03
  ep_rew_mean
                      | 1.82e+03
time/
                       120
  fps
                      | 1441
   iterations
   time elapsed
                      | 6113
   total timesteps
                      737792
train/
                      | 0.0006974157
   approx_kl
   clip_fraction
                      | 0
                      0.2
   clip_range
   entropy_loss
                       | -0.827
   explained_variance
                     | 0.72
   learning_rate
                       | 1e-06
   loss
                       I 179
   n updates
                      | 14400
   policy_gradient_loss | 0.00125
   value loss
rollout/
   ep len mean
                      | 1.13e+03
  ep_rew_mean
                      | 1.82e+03
time/
                      | 120
  fps
   iterations
                       | 1442
                       | 6118
   time_elapsed
```

```
total_timesteps
                      | 738304
train/
  approx kl
                      0.00018210709
   clip_fraction
                      | 0
                      0.2
   clip range
                      | -0.762
   entropy_loss
   explained_variance | 0.423
  learning_rate
                      | 1e-06
                      516
   loss
                     | 14410
   n_updates
   policy_gradient_loss | -0.000377
   value loss
              | 641
rollout/
  ep_len_mean
ep_rew_mean
                      | 1.13e+03
                    1.82e+03
time/
  fps
                      | 120
                      | 1443
  iterations
                     6122
   time_elapsed
  total_timesteps
                     | 738816
train/
                      | 0.00067776896
  approx_kl
   clip fraction
  clip_range
entropy_loss
                    | 0.2
                      | -0.8
   explained_variance | 0.468
   learning_rate
                      le-06
                      | 408
  loss
                      | 14420
   n_updates
   policy_gradient_loss | -0.00105
   value loss
rollout/
  ep_len_mean
                     | 1.14e+03
  ep_rew_mean
                     | 1.82e+03
time/
                      | 120
                     | 1444
   iterations
  time_elapsed
                    6126
  total timesteps
                      | 739328
train/
                     0.0010270758
   approx kl
   clip fraction
  clip_range
entropy_loss
                      0.2
                     -0.899
   explained_variance | 0.782
   learning_rate | 1e-06
                      | 73.6
   loss
   n updates
                      | 14430
   policy_gradient_loss | -0.00238
   value loss
                      | 164
rollout/
                   | 1.14e+03
  ep_len_mean
ep_rew_mean
                      | 1.82e+03
time/
                      | 120
  fps
                      | 1445
   iterations
                    | 6130
| 739840
  time_elapsed
  total_timesteps
train/
  approx kl
                      | 0.0013571101
   clip_fraction
   clip range
                      0.2
                      | -0.856
   entropy_loss
   explained_variance | 0.603
                      | 1e-06
   learning_rate
                      | 14440
   n_updates
   policy_gradient_loss | -0.000741
   value loss
                      | 591
rollout/
                      | 1.14e+03
  ep_len_mean
  ep_rew_mean
                      | 1.83e+03
time/
                      | 120
  fps
  iterations
                      | 1446
```

```
time elapsed
                      | 6136
  total_timesteps
                      | 740352
train/
                      0.0031083864
  approx kl
  clip fraction
                      0.2
  clip_range
                      i -0.841
  entropy loss
  explained_variance | 0.838
                      le-06
  learning_rate
                      | 75.5
  loss
                      | 14450
  n updates
  policy_gradient_loss | -0.00187
  value loss
rollout/
  ep len mean
                      1.83e+03
  ep rew mean
time/
                      | 120
  fps
  iterations
                     | 1447
                    | 6140
  time_elapsed
                    740864
  total_timesteps
train/
  approx kl
                     | 0.00032878912
                     0.000391
  clip_fraction
                     | 0.2
  clip range
  entropy_loss
                     | -0.768
  explained variance | 0.735
                     | 1e-06
  learning_rate
                      | 133
  n updates
                      1 14460
  policy gradient loss | 0.00157
  value_loss | 375
                     | 1.14e+03
  ep_len_mean
  ep_rew_mean
                     | 1.83e+03
time/
                      | 120
                    | 1448
  iterations
  __ccapsed | 6144
total_timesteps | 7412
                      741376
                      0.0005328049
  approx kl
                     0.00215
  clip_fraction
  clip range
                     0.2
                     | -0.905
  entropy_loss
  explained_variance | 0.867
  learning_rate
                     | 1e-06
                      | 83.3
  loss
                      | 14470
  n updates
  policy_gradient_loss | -0.00221
  value_loss | 179
rollout/
                     | 1.14e+03
  ep_len_mean
  ep_rew_mean
                     | 1.83e+03
time/
                      120
  fps
                      | 1449
  iterations
  time elapsed
                    6148
                    | 741888
  total_timesteps
train/
  approx_kl
                      0.0019002289
  clip_fraction
                      0.2
  clip_range
  entropy_loss
                      | -0.79
  explained_variance | 0.735
  learning_rate
                      | 1e-06
                      | 414
  loss
                      14480
  n updates
  policy gradient loss | -0.00279
  value loss
                      | 1.14e+03
  ep len mean
                      | 1.82e+03
  ep_rew_mean
time/
                      | 120
 fps
```

```
iterations
                       | 1450
   time_elapsed
                       | 6152
   total timesteps
                       742400
train/
                       0.0003984758
   approx kl
   clip_fraction
                       0.2
   clip range
   entropy_loss
                       | -0.7
   explained variance
                     0.651
                       | 1e-06
   learning_rate
                         50.8
   loss
                       | 14490
   n_updates
   policy_gradient_loss | 0.000699
   value_loss
                       | 132
   ep_len_mean
ep_rew_mean
                        1.14e+03
                       1.82e+03
time/
                       | 120
   fps
                       | 1451
   iterations
   time elapsed
                      | 6157
   total_timesteps
                      | 742912
                       | 0.002372504
   approx_kl
   clip fraction
   clip_range
                       0.2
   entropy loss
                       -0.74
   explained_variance | 0.652
   learning_rate
                       | 1e-06
   loss
                       i 231
   n_updates
                       | 14500
   policy_gradient_loss | -0.00159
   value loss
rollout/
   ep_len_mean
                       | 1.14e+03
   ep_rew_mean
                       | 1.82e+03
time/
   fps
                       | 120
                       | 1452
   iterations
                       | 6161
   time elapsed
   total_timesteps
                       | 743424
train/
                       0.000677799
   approx_kl
   clip fraction
   clip_range
                      0.2
                       | -0.773
   entropy_loss
   explained_variance
                      | 0.514
   learning_rate
                       | 1e-06
   loss
                       | 525
   n updates
                        14510
   policy_gradient_loss | 0.000525
   value loss
rollout/
                       | 1.14e+03
   ep len mean
   ep_rew_mean
                       | 1.82e+03
time/
                       | 120
   fps
   iterations
                      1453
                      | 6165
   time_elapsed
   total_timesteps
                       743936
train/
   approx kl
                       | 0.0035593882
   clip_fraction
                       0.00996
   clip range
                       0.2
   entropy_loss
                       | -0.618
   explained variance
                     | 0.724
   learning_rate
                       | 1e-06
                       27.6
   n_updates
                       14520
   policy_gradient_loss | -0.00319
   value loss
                       | 1.14e+03
   ep_len_mean
   ep_rew_mean
                       | 1.82e+03
time/
```

fps iterations time_elapsed	120 1454 6169
total_timesteps train/ approx_kl clip_fraction	744448 0.002854771 0.00156
clip_range entropy_loss explained_variance learning_rate	0.2 -0.858
! ' , '=' -	53.6 14530 -0.000909 108
rollout/	
ep_len_mean ep_rew_mean time/	1.14e+03 1.82e+03
fps	120
iterations time elapsed	1455 6174
total_timesteps	744960
train/ approx kl	
clip_fraction	0.0135
<pre> clip_range entropy loss</pre>	0.2 -0.695
entropy_toss explained_variance	0.279
learning_rate	l 1e-06
loss n updates	353 14540
policy_gradient_loss	
value_loss	877
rollout/	
ep_len_mean ep rew mean	1.14e+03 1.82e+03
time/	1.026+05
fps	120
iterations time elapsed	1456 6178
total_timesteps	745472
train/	
<pre> approx_kl clip_fraction</pre>	0.0042602057 0.00449
clip_range	0.2
entropy_loss	-0.769 0.881
<pre> explained_variance learning_rate</pre>	1e-06
loss	55.3
<pre> n_updates policy_gradient_loss</pre>	14550 -0 000855
	153
rollout/	
ep_len_mean	1.14e+03
ep_rew_mean time/	1.83e+03
fps	120
iterations	1457
<pre> time_elapsed total timesteps</pre>	6182 745984
train/	
approx_kl	0.00047329743
<pre> clip_fraction clip range</pre>	0.000195 0.2
entropy_loss	-0.729
• •	0.382 1e-06
<pre> learning_rate loss</pre>	64.7
n_updates	14560
<pre>policy_gradient_loss value loss</pre>	0.000286 192
	1 1 2 1
1 11	
rollout/ ep len mean	::
rollout/ ep_len_mean ep_rew_mean	

```
time/
                        120
   fps
   iterations
                        1458
                       | 6187
   time_elapsed
   total timesteps
                       746496
                        0.0015490127
   approx kl
                       | 0.000586
   clip fraction
   clip range
                       0.2
   entropy_loss
                       | -0.81
   explained_variance
                     | 0.6
                       | 1e-06
   learning_rate
   loss
                       | 266
                       | 14570
   n_updates
   policy_gradient_loss | -0.00169
   value_loss
                       | 612
rollout/
                        1.14e+03
   ep_len_mean
                     | 1.84e+03
   ep_rew_mean
time/
                       | 120
  fps
                      1459
   iterations
                     | 6191
   time elapsed
   total_timesteps
                      747008
train/
                       | 0.0027058404
  approx_kl
   clip fraction
                      0.00234
   clip_range
entropy_loss
                       0.2
                      | -0.834
   explained_variance | 0.799
   learning_rate
                       | 1e-06
   loss
                       1 60
                       | 14580
   n_updates
   policy_gradient_loss | -0.0033
   value loss
   ep_len_mean
                      | 1.13e+03
  ep_rew_mean
                      | 1.82e+03
time/
  fps
                       1 120
   iterations
                      | 1460
                      | 6195
   time elapsed
   total_timesteps
                      | 747520
train/
                      0.0017375984
   approx_kl
   clip_fraction
                      | 0
                      0.2
   clip_range
                       | -0.781
   entropy_loss
   explained_variance | 0.652
                      i 1e-06
   learning_rate
                       | 280
   loss
                      14590
   n updates
   policy_gradient_loss | -0.00143
   value loss
                       | 615
rollout/
                      1.13e+03
   ep len mean
   ep rew mean
                      | 1.82e+03
time/
                      | 120
  fps
   iterations
                      | 1461
   time_elapsed
                       | 6199
  total_timesteps
                       | 748032
train/
   approx kl
                      0.0025095958
   clip_fraction
                      | 0.0178
   clip range
                      0.2
   entropy_loss
                      | -0.7
   explained variance | 0.482
                       l 1e-06
   learning_rate
   loss
                       | 306
                       | 14600
   n updates
   policy gradient loss | -0.00241
   value_loss
rollout/
                       | 1.13e+03
  ep_len_mean
```

```
ep rew mean
                       | 1.82e+03
 time/
                       120
    fps
                       | 1462
    iterations
                       | 6204
    time elapsed
                      748544
    total_timesteps
                       0.0011002882
    approx kl
    clip fraction
                      0.00137
    clip_range
entropy_loss
                      | 0.2
                       | -0.882
    explained_variance | 0.521
    learning_rate
                      | 1e-06
                       | 210
    loss
                       14610
    n updates
    policy gradient loss | -0.000996
    value loss
 rollout/
    ep len mean
                       | 1.12e+03
                       | 1.81e+03
    ep_rew_mean
 time/
                       120
   fps
                      | 1463
    iterations
                     6208
    time_elapsed
    total timesteps
                      | 749056
 train/
    approx kl
                      0.0019027833
                      0.00293
    clip_fraction
    clip_range
entropy_loss
                     0.2
-0.804
    explained variance | 0.792
    learning_rate | 1e-06
    loss
                       | 198
                       14620
    n_updates
    policy_gradient_loss | 0.00167
               | 341
    value_loss
 rollout/
                     | 1.12e+03
    ep len mean
    ep rew mean
                       | 1.81e+03
 time/
                       | 120
   fps
                     | 1464
| 6212
| 749568
    iterations
    time_elapsed
    total_timesteps
 train/
    approx_kl
                      0.0019937935
                      | 0.000391
    clip_fraction
                      0.2
    clip range
                      | -0.774
    entropy_loss
    explained_variance | 0.688
                  | 1e-06
    learning_rate
                      | 14630
    n_updates
    policy_gradient_loss | -0.00114
    value_loss | 617
 rollout/
                     1.12e+03
1.81e+03
    ep len mean
    ep rew mean
 time/
                       120
   fps
                       | 1465
    iterations
                     | 6217
| 750080
    time elapsed
   total_timesteps
 train/
                       0.007902519
    approx_kl
    clip fraction
                     0.0859
                      | 0.2
    clip range
    entropy loss
                       -0.842
    explained_variance | 0.878
    learning_rate
                       le-06
                       | 79.6
    loss
                       | 14640
    n_updates
    policy_gradient_loss | -0.00912
    value_loss | 127
| rollout/
```

```
ep len mean
                      | 1.13e+03
   ep_rew_mean
                      | 1.82e+03
time/
                      | 120
  fps
                      1466
   iterations
   time_elapsed
                      | 6221
  total timesteps
                      | 750592
train/
                      | 0.0087287575
  approx kl
   clip_fraction
                      | 0.0361
   clip_range
                      0.2
   entropy_loss
                      | -0.952
   explained variance | 0.818
   learning_rate
                      | 1e-06
                      70.7
   loss
                      14650
   n_updates
   policy gradient loss | -0.00317
   value_loss | 204
rollout/
                      | 1.13e+03
   ep_len_mean
  ep_rew_mean
                     | 1.82e+03
time/
                      | 120
                     | 1467
  iterations
  __ccapsed | 6226
total_timesteps | 75114
                      | 751104
train/
                      0.0006425384
  approx_kl
   clip fraction
  clip_range
                      0.2
  entropy_loss
                      | -0.992
   explained_variance | 0.834
   learning_rate | 1e-06
                      | 193
   loss
   n updates
                      | 14660
   policy_gradient_loss | -0.002
   value_loss | 365
rollout/
                    | 1.13e+03
| 1.82e+03
   ep len mean
  ep_rew_mean
time/
  fps
                      120
                      | 1468
  iterations
                     6230
  time elapsed
                    751616
  total_timesteps
train/
                      | 0.0073578805
  approx_kl
                     0.00703
   clip_fraction
   clip_range
                     | 0.2
  entropy_loss | -0.955
explained_variance | 0.911
                      | 1e-06
   learning_rate
                      | 50.2
  loss
   n updates
                      | 14670
   policy_gradient_loss | -0.00184
                  | 145
   value loss
rollout/
  ep_len_mean
                      1.13e+03
                     | 1.81e+03
  ep_rew_mean
time/
                      | 120
  fps
  iterations
                      | 1469
                     | 6234
   time_elapsed
   total_timesteps
                      | 752128
train/
  approx kl
                      | 0.0017077036
   clip_fraction
                     | 0
   clip range
                      0.2
                      | -0.963
   entropy_loss
   explained variance | 0.885
                      | 1e-06
   learning_rate
   loss
                      | 59.8
   n updates
                      | 14680
   policy_gradient_loss | -0.0012
                      | 163
   value_loss
```

```
rollout/
                        1.13e+03
   ep len mean
  ep rew mean
                       | 1.81e+03
time/
                       1 120
  fps
                       | 1470
   iterations
   time elapsed
                        6238
                      | 752640
   total timesteps
                      | 0.0069040796
  approx_kl
  clip_fraction
                      | 0.000391
  clip_range
                      0.2
  entropy loss
                      | -0.926
   explained variance | 0.915
   learning rate
                      l 1e-06
  loss
                      | 134
                      | 14690
   n updates
   policy_gradient_loss | -0.00488
   value loss | 227
rollout/
  ep_len_mean
ep_rew_mean
                      | 1.13e+03
                      | 1.81e+03
time/
                      | 120
  fps
                     1471
   iterations
   time_elapsed
                      | 6243
  total_timesteps
                      | 753152
train/
                     0.0058905915
0.0133
   approx kl
   clip_fraction
   clip_range
                     0.2
  entropy_loss | -0.915
explained_variance | 0.858
                      l 1e-06
   learning_rate
   loss
                      | 58.7
                      14700
   n updates
   policy_gradient_loss | -0.00638
   value loss
                      | 193
rollout/
                      | 1.13e+03
  ep len mean
   ep_rew_mean
                      | 1.81e+03
time/
                      | 120
  fps
                      | 1472
  iterations
  time_elapsed
                     | 6247
  total_timesteps
                     | 753664
train/
  approx kl
                      0.0027870156
                      0.000586
   clip_fraction
  clip_range
entropy_loss
                      0.2
                      | -0.949
   explained variance | 0.812
  learning_rate
                      | 1e-06
   loss
                      | 252
                      | 14710
   n_updates
   policy_gradient_loss | -0.00229
   value_loss
                     | 1.13e+03
   ep len mean
  ep_rew_mean
                      1.81e+03
time/
                      | 1473
   iterations
   time elapsed
                      | 6251
                     754176
  total_timesteps
                      | 0.00528854
  approx_kl
   clip fraction
                      0.00352
   clip_range
                      0.2
                      | -0.864
   entropy loss
   explained_variance
                     0.892
   learning_rate
                       | 1e-06
                       | 83.5
   n updates
                       | 14720
   policy_gradient_loss | -0.00361
   value loss | 233
```

```
rollout/
                        1.14e+03
  ep len mean
   ep_rew_mean
                      | 1.82e+03
time/
                      | 120
  fps
                        1474
   iterations
                      | 6255
   time elapsed
  total_timesteps
                      754688
train/
  approx kl
                      0.0026944878
   clip_fraction
                      0.00879
  clip range
                      0.2
   entropy_loss
                      | -0.749
   explained variance | 0.896
  learning_rate
                      1 1e-06
                      | 37
                      | 14730
   n_updates
   policy_gradient_loss | -0.0029
   value_loss | 79.5
rollout/
   ep_len_mean
                        1.14e+03
  ep_rew_mean
                      | 1.82e+03
time/
                      | 120
                      | 1475
  iterations
  time elapsed
                     | 6259
                     | 755200
  total_timesteps
                      0.0027254485
  approx kl
   clip_fraction
                      0.2
   clip_range
   entropy loss
                      | -0.706
   explained_variance | 0.772
   learning_rate
                      | 1e-06
  loss
                      | 158
   n_updates
                      | 14740
   policy_gradient_loss | -0.00205
   value_loss
                      | 282
rollout/
                      | 1.14e+03
   ep len mean
  ep rew mean
                      | 1.83e+03
time/
  fps
                      120
  iterations
                      | 1476
                    | 6264
   time elapsed
   total_timesteps
                      | 755712
train/
                      | 0.0010044517
  approx_kl
                      0.00254
   clip fraction
                      0.2
   clip_range
  entropy_loss
                      -0.74
   explained_variance | 0.569
   learning_rate
                      | 1e-06
                      | 143
   loss
                      14750
   n updates
   policy_gradient_loss | 0.000879
   value loss
                      | 781
rollout/
                     | 1.14e+03
  ep_len_mean
                      | 1.83e+03
  ep_rew_mean
time/
                      | 120
  fps
   iterations
                        1477
   time_elapsed
                      | 6268
   total_timesteps
                      | 756224
train/
  approx kl
                      0.0043139495
   clip fraction
                      0.00332
   clip_range
                      0.2
                      | -0.884
   entropy_loss
   explained variance
                      0.885
   learning_rate
                      | 1e-06
   loss
   n_updates
                      | 14760
   policy_gradient_loss | -0.00129
                      | 244
   value_loss
```

rollout/ | 1.14e+03 | 1.82e+03 ep_len_mean ep_rew_mean ep_len_mean time/ fps 120 1478 iterations 6272 time_elapsed 756736 total_timesteps | train/ 0.004731491 | 0.049 | approx_kl clip_fraction clip_range | 0.2 entropy_loss | -0.839 explained_variance | 0.87 learning_rate l 1e-06 | 45.9 loss 14770 n updates policy_gradient_loss | -0.00324 value_loss | 113

rollout/	1 1
ep len mean	1.14e+03
ep rew mean	1.82e+03
time/	į i
fps	120
iterations	1479
time elapsed	6276
total timesteps	757248
train/	
approx_kl	0.00181663
<pre> clip_fraction</pre>	0.00449
clip_range	0.2
entropy_loss	-0.901
<pre> explained_variance</pre>	0.653
<pre> learning_rate</pre>	1e-06
loss	158
n_updates	14780
<pre>policy_gradient_loss</pre>	-0.0012
value_loss	821

rollout/	
ep_len_mean	1.14e+03
ep_rew_mean	1.82e+03
time/	
fps	120
iterations	1480
time_elapsed	6281
total_timesteps	757760
train/	
approx_kl	0.008168998
clip_fraction	0.0629
clip_range	0.2
entropy_loss	-1.05
<pre>explained_variance</pre>	0.904
learning_rate	1e-06
loss	98
n_updates	14790
<pre>policy_gradient_loss</pre>	-0.01
value_loss	187
	ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss

.....

	rollout/	
	ep_len_mean	1.14e+03
	ep_rew_mean	1.82e+03
	time/	
	fps	120
	iterations	1481
	time_elapsed	6285
I	total timesteps	758272
ĺ	train/	ĺ
	approx_kl	0.0058791228
	clip_fraction	0.0312
	clip_range	0.2
	entropy_loss	-0.961
	<pre>explained_variance</pre>	0.927
	learning_rate	1e-06
	loss	19.8
	n_updates	14800
	<pre>policy_gradient_loss</pre>	-0.0051

value loss	123
vatue_toss	125
rollout/	
ep_len_mean	1.14e+03
ep_rew_mean	1.82e+03
time/ fps	
iterations	120 1482
time_elapsed	6289
total timesteps	758784
train/	
approx kl	0.0032985187
clip_fraction	0.00801
clip_range	0.2
entropy_loss	-1
explained_variance	0.337
learning_rate	1e-06 210
loss n updates	210 14810
· _ '	-0.00102
value loss	754
vatue_t033	
rollout/	l I
ep_len_mean	1.14e+03
ep_rew_mean	1.82e+03
time/	
fps	120
iterations	1483
time_elapsed	6293 759296
<pre> total_timesteps train/</pre>	759290
approx kl	
clip_fraction	0.00391
clip range	0.2
entropy_loss	-1.01
explained_variance	0.323
learning_rate	le-06
loss	60.9
n_updates	14820
policy_gradient_loss	-0.0028
value_loss	164
rollout/	
ep len mean	
ep rew mean	1.82e+03
time/	i i
fps	120
iterations	1484
time_elapsed	6297
total_timesteps	759808
train/	
approx_kl	0.0014451311
clip_fraction	0.00137 0.2
<pre> clip_range entropy_loss</pre>	0.2 -1.02
enclopy_toss explained variance	0.885
learning_rate	1e-06
loss	54.2
n updates	14830
	0.00272
value_loss	116
rollout/	
ep_len_mean	1.14e+03
ep_rew_mean	1.82e+03
time/	 120
fps iterations	120 1485

iterations 1485 time_elapsed total_timesteps 6302 760320 | train/ approx_kl 0.002079586 clip_fraction clip_range entropy_loss explained_variance 0.00117 0.2 -1.01 0.778 learning_rate 1e-06 loss 299 14840 n_updates

policy_gradient_loss value_loss	0.00167 596
rollout/ ep_len_mean ep_rew_mean	1.14e+03 1.81e+03
time/ fps iterations time_elapsed total timesteps	120 1486 6306 760832
train/ approx_kl clip_fraction clip_range	0.009554692 0.0299 0.2
<pre> entropy_loss explained_variance learning_rate loss n updates</pre>	-1.05
• = •	-0.00395 140
rollout/ ep_len_mean ep_rew_mean time/	1.14e+03 1.81e+03
fps iterations time_elapsed total_timesteps	120 1487 6310 761344
train/ approx_kl clip_fraction clip_range entropy_loss	0.002517364 0.0105 0.2 -1.04
explained_variance learning_rate loss n_updates	0.848 1e-06 225 14860
policy_gradient_loss value_loss	-0.00297 487
rollout/ ep_len_mean ep_rew_mean time/	1.14e+03 1.81e+03
fps iterations time_elapsed total_timesteps train/	120 1488 6315 761856
approx_kl clip_fraction clip_range entropy loss	0.0025138047 0.000781 0.2 -1.13
explained_variance learning_rate loss n_updates	0.795 1e-06 94.5 14870
<pre>policy_gradient_loss value_loss rollout/</pre>	-0.00165 326
ep_len_mean	1.14e+03 1.81e+03 120
iterations time_elapsed total_timesteps train/	1489 6319 762368
approx_kl clip_fraction clip_range entropy_loss explained_variance	0.00043317524 0 0.2 -1.18 0.887
learning_rate loss	1e-06 53.8

n updates	14880
policy_gradient_loss	
value_loss	415
1 11	
rollout/ ep_len_mean	
ep_rew_mean	1.81e+03
time/ fps	
iterations	1490
<pre> time_elapsed total_timesteps</pre>	6323 762880
train/	
approx_kl clip_fraction	0.0040028943 0.0135
clip_range	0.2
<pre> entropy_loss explained variance</pre>	-1.17 0.755
learning_rate	1e-06
loss	62 14890
<pre> n_updates policy_gradient_loss </pre>	
value_loss	187
rollout/	
ep_len_mean ep_rew_mean	1.14e+03 1.83e+03
time/	i i
fps iterations	120 1491
time_elapsed	6327
<pre> total_timesteps train/</pre>	763392
approx_kl	0.008486682
<pre> clip_fraction clip_range</pre>	0.00625 0.2
entropy_loss	-1.1
<pre> explained_variance learning rate</pre>	0.901 1e-06
loss	53.5
<pre> n_updates policy_gradient_loss </pre>	14900 -0.00346
value_loss	143
rollout/	
ep_len_mean	1.14e+03 1.83e+03
ep_rew_mean time/	1.65e+05
fps	120
<pre> iterations time_elapsed</pre>	1492 6331
<pre>total_timesteps</pre>	763904
train/ approx kl	 0.0018101188
clip_fraction	0
<pre> clip_range entropy loss</pre>	0.2 -1.12
explained_variance	0.163
<pre> learning_rate loss</pre>	1e-06 997
n_updates	14910
	-0.000972 1.13e+03
rollout/	
ep_len_mean	1.14e+03
ep_rew_mean time/	1.83e+03
fps	120
iterations time elapsed	1493 6336
total_timesteps	764416
train/	
approx_kl clip_fraction	0.0014635649 0.000586
clip_range	0.2
· ! '.' !	-1.03 0.781
learning_rate	1e-06

loss	46.5
n_updates	14920
<pre>policy_gradient_loss </pre>	-0.00107
value_loss	105
L rollout/	
rollout/ ep len mean	
ep_ten_mean	1.14e+03
time/	11020.03
fps	120
iterations	1494
time_elapsed	6340
total_timesteps	764928
train/	
approx_kl clip_fraction	0.0023632362 0.00898
clip_rraction	0.00030 0.2
entropy_loss	-1.02
	0.253
learning rate	le-06
loss	390
n_updates	14930
policy_gradient_loss	
value_loss	1.07e+03
rollout/	l I
ep_len_mean	
ep rew mean	1.82e+03
time/	i i
fps	120
iterations	1495
time_elapsed	6344
total_timesteps	765440
train/ approx kl	
clip fraction	0.0182
clip range	0.2
	-1.07
explained_variance	0.585
learning_rate	1e-06
loss	83.4
n_updates	14940
policy_gradient_loss	-0.00702
value_loss	560
rollout/	
ep_len_mean	1.14e+03
ep_rew_mean	1.82e+03
time/	
fps	120
iterations	1496
time_elapsed total timesteps	6348 765952
train/	703332
approx kl	0.0011126387
clip_fraction	0.000781
clip_range	0.2
entropy_loss	-1.13
explained_variance	0.924
learning_rate	1e-06
loss n updates	63 14950
. – .	14930
value_loss	113
rollout/	
ep_len_mean	1.14e+03
ep_rew_mean	1.82e+03
time/	
fps iterations	120 1497
time elapsed	6352
total timesteps	766464
train/	j
approx_kl	0.0022535224
clip_fraction	0.0152
clip_range	0.2
entropy_loss	-1.08
<pre> explained_variance </pre>	0.662

1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
policy_gradient_loss -0.6 value_loss 903 903 905	
value_loss 903	
ep_len_mean 1.14 ep_rew_mean 1.82 time/	<u>:</u>
ep_len_mean 1.14 ep_rew_mean 1.82 time/	
ep_len_mean 1.14 ep_rew_mean 1.82 time/	
ep_rew_mean 1.82 time/	Į
time/	4e+03
1 1	2e+03
Tps 120	ļ
iterations 1498	
iterations 1498 time elapsed 6356	
total timesteps 7669	
train/	1
	11342956
clip_fraction 0.03	
clip_range 0.2	į
entropy_loss -1.0	98
<pre> explained_variance 0.05</pre>	586
learning_rate 1e-0	
loss 37.6	
n_updates 1497	- 1
policy_gradient_loss -0.0	90234
value_loss 273	I
rollout/	1
	i 5e+03 l
– – .	4e+03
time/ 1.05	
fps 120	i
iterations 1499	e i
time elapsed 6363	
total_timesteps 7674	488 j
train/	į
approx_kl 0.00	953703026
clip_fraction 0.01	119
clip_range 0.2	1
entropy_loss -1.1	11
<pre> explained_variance 0.57</pre>	72
learning_rate le-0	96
loss 235	
n_updates 1498	
policy_gradient_loss -0.0	90/4
value_loss 496	I
rollout/	1
1	5e+03
	4e+03
time/	i
fps 120	į
iterations 1500	9
time_elapsed 6365	5
total_timesteps 7680	900
train/	1
–	911810379
clip_fraction 0	ļ
clip_range 0.2	
entropy_loss -1.3	
explained_variance 0.42	
learning_rate 1e-0	ן טפ
loss 422 n updates 1499	1 10
	90222
value loss 975	
vatac_toss	
rollout/	I
ep_len_mean 1.15	5e+03
1 1 1	4e+03
time/	1
fps 120	1
iterations 1503	
time_elapsed 6369	
total_timesteps 7685	512
train/	
1	12499964
approx_kl 0.03	
approx_kl 0.01 0.02 clip_fraction 0.04	
approx_kl 0.03	479

```
explained variance
                     0.841
   learning_rate
                      | 1e-06
                      61.5
   loss
                      | 15000
   n_updates
   policy_gradient_loss | -0.00616
                     | 140
   value loss
                        1.16e+03
   ep_len_mean
  ep_rew_mean
                      | 1.84e+03
time/
  fps
                      | 120
   iterations
                      | 1502
                      | 6373
   time elapsed
                     769024
  total timesteps
                      | 0.0063446336
  approx_kl
  clip fraction
                      0.0281
   clip_range
                      0.2
                      | -1.09
   entropy_loss
   explained_variance | 0.9
                     | 1e-06
   learning_rate
                      | 48.8
   n updates
                     | 15010
   policy_gradient_loss | -0.00757
   value loss | 109
rollout/
   ep len mean
                      | 1.16e+03
                      | 1.84e+03
  ep_rew_mean
                      | 120
  fps
                      | 1503
   iterations
                      | 6377
   time_elapsed
  total_timesteps
                      | 769536
train/
   approx_kl
                      | 0.0034090765
   clip_fraction
                      0.0176
   clip_range
                      | 0.2
                      | -1.15
   entropy_loss
   explained_variance | 0.527
                      | 1e-06
   learning_rate
                      | 436
                      | 15020
   n updates
   policy_gradient_loss | -0.000628
   value loss | 737
rollout/
                      | 1.16e+03
  ep_len_mean
   ep_rew_mean
                     | 1.84e+03
time/
                      | 120
  fps
  iterations
                      | 1504
   time_elapsed
                     | 6383
  total_timesteps
                      | 770048
train/
                      0.008751434
  approx kl
   clip_fraction
                      0.0439
  clip_range
entropy_loss
                      0.2
                      | -1.16
   explained variance | 0.742
                      | 1e-06
   learning_rate
   loss
                      | 84.6
                      | 15030
   n_updates
   policy_gradient_loss | -0.00925
   value_loss
                      | 231
                      | 1.15e+03
   ep len mean
                      | 1.84e+03
  ep rew mean
time/
                      | 120
  fps
                      | 1505
  iterations
                      | 6387
   time elapsed
  total_timesteps
                      770560
train/
                      | 0.007862855
   approx_kl
   clip fraction
                      0.0174
   clip_range
                      0.2
```

	-1.07 0.768 1e-06 33.1 15040 -0.00301 102	
rollout/	1 15	
ep_len_mean	1.15e+03 1.84e+03	
ep_rew_mean time/	1.046+05	
fps	120	
iterations	1506	
time_elapsed	6391	
<pre> total_timesteps train/</pre>	771072	
approx_kl	0.0013640361	
clip_fraction	0.000781	
clip_range	0.2	
<pre> entropy_loss explained_variance </pre>	-1.13 0.696	
learning rate	1e-06	
loss	116	
n_updates	15050	
<pre>policy_gradient_loss value_loss</pre>	0.00369	
value_toss	450	
rollout/		
ep_len_mean ep_rew_mean	1.15e+03 1.83e+03	
ep_rew_mean time/	1.036+03	
fps	120	
iterations	1507	
time_elapsed	6395	
<pre> total_timesteps train/ </pre>	771584	
approx kl	0.0044630887	
clip_fraction	0.000391	
clip_range	0.2	
entropy_loss	-1.17	
<pre> explained_variance learning rate</pre>	0.906 1e-06	
loss	41.9	
n_updates	15060	
policy_gradient_loss		
value_loss	144	
rollout/	1 150,03	
ep_len_mean ep_rew_mean	1.15e+03 1.83e+03	
time/		
fps	120	
iterations	1508	
time_elapsed total timesteps	6399 772096	
totat_timesteps 7/2090		
approx_kl	0.0036962905	
clip_fraction	0.00898	
<pre> clip_range entropy loss</pre>	0.2 -1.14	
explained variance	0.777	
learning_rate	1e-06	
loss	171	
n_updates	15070	
<pre>policy_gradient_loss value loss</pre>	-0.00258	
rollout/	1 150102	
<pre> ep_len_mean ep rew mean </pre>	1.15e+03 1.83e+03	
time/		
fps	120	
iterations	1509	
<pre> time_elapsed total_timesteps </pre>	6403 772608	
totat_timesteps train/		
approx_kl	0.0033869997	
clip_fraction	0	

```
clip_range
                      0.2
   entropy_loss
                      | -1.18
   explained_variance | 0.847
   learning_rate
                      | 1e-06
                      | 42.4
   loss
                     | 15080
   n updates
   policy_gradient_loss | -0.00117
   value_loss | 139
rollout/
   ep_len_mean
                        1.17e+03
  ep_rew_mean
                      | 1.85e+03
time/
  fps
                      | 120
                      | 1510
   iterations
   time elapsed
                     6408
                     | 773120
  total timesteps
train/
  approx_kl
                      | 0.0051032417
   clip_fraction
                      0.000586
                     | 0.2
   clip_range
  entropy_loss | -1.15
explained_variance | 0.797
                     | 1e-06
   learning_rate
                     | 118
                      | 15090
   n updates
   policy_gradient_loss | -0.00245
   value loss | 233
                      | 1.17e+03
   ep len mean
                      1.85e+03
  ep_rew_mean
time/
                      120
  fps
  iterations
                      | 1511
                    | 6412
| 773632
  time_elapsed
  total_timesteps
                      | 0.004120313
  approx_kl
                     | 0.00918
  clip_fraction
                     | 0.2
   clip_range
                      | -1.17
   entropy_loss
   explained_variance | 0.542
   learning_rate | 1e-06
                       | 241
   n updates
                      15100
   policy_gradient_loss | -0.000219
   value_loss | 687
                    | 1.17e+03
| 1.85e+03
  ep_len_mean
  ep_rew_mean
                      | 120
  iterations | 1512
time_elapsed | 6416
total_timesteps | 774144
train/
                      0.011734534
  approx kl
                     0.0225
   clip fraction
   clip_range
                     | -1.17
   entropy_loss
   explained_variance | 0.857
                      | 1e-06
   learning_rate
   loss
                       | 15110
   n_updates
   policy_gradient_loss | -0.0037
                       | 124
   value_loss
rollout/
                      | 1.17e+03
  ep len mean
  ep_rew_mean
                      1.86e+03
time/
                      | 120
                      | 1513
  iterations
   time elapsed
                      | 774656
  total_timesteps
train/
                       | 0.00088797277
  approx_kl
```

<pre> clip_fraction clip range</pre>	0 0.2
= 3	-1.16
	0.836
3_	l 1e-06
loss	56.5
<pre> n_updates policy_gradient_loss</pre>	15120
	172
_	
rollout/ ep_len_mean	 1.17e+03
ep_ten_mean ep_rew_mean	1.17e+03
time/	11000.03
fps	120
iterations	1514
<pre> time_elapsed total_timesteps</pre>	6424 775168
train/	773100
approx_kl	0.006323172
clip_fraction	0.000195
<pre> clip_range entropy_loss</pre>	0.2 -1.16
<u> </u>	0.866
learning rate	le-06
•	99.2
n_updates	15130
<pre>policy_gradient_loss value_loss</pre>	-0.0035 333
vatue_toss	
rollout/ ep len mean	 1.17e+03
ep_ten_mean ep_rew_mean	1.17e+03 1.86e+03
time/	
fps	120
iterations	1515 6429
<pre>time_elapsed total timesteps</pre>	6429 775680
train/	
approx_kl	0.0012686487
clip_fraction	0
<pre> clip_range entropy loss</pre>	0.2 -1.14
<u> </u>	0.853
	le-06
loss	111
· — ·	15140 -0.00133
value_loss	190
rollout/	
ep len mean	
ep_rew_mean	1.87e+03
time/	
fps iterations	120 1516
time_elapsed	1516
total_timesteps	776192
train/	
approx_kl	0.0038388697
<pre> clip_fraction clip range</pre>	0.00176 0.2
ctip_range entropy_loss	-1.13
<pre> explained_variance</pre>	0.933
learning_rate	1e-06
l loss	47.6
· - ·	15150 -0.00099
	107
rollout/	
ep_len_mean	
ep_rew_mean	1.87e+03
time/	
fps	120
iterations time elapsed	1517 6437
total_timesteps	776704
train/	i i

```
approx kl
                      0.0029892204
   clip_fraction
                     | 0.0252
  clip_range
entropy_loss
                    0.2
                      | -1.08
   explained variance | 0.671
   learning_rate
                     | 1e-06
                      | 322
   loss
             | 15160
   n updates
   policy_gradient_loss | -0.000607
   value_loss | 734
rollout/
                     | 1.18e+03
   ep_len_mean
  ep rew mean
                     | 1.87e+03
time/
                      120
                    | 1518
  iterations
  time_elapsed
                    | 6441
  total_timesteps
                      | 777216
train/
                     | 0.0020475825
  approx_kl
                    į 0
   clip fraction
  clip_range
entropy_loss
                     0.2
                     | -1.11
   explained_variance | 0.735
   learning_rate | 1e-06
                     | 57.9
   loss
   n_updates
                     | 15170
   policy_gradient_loss | -0.00107
rollout/
  ep len mean
                     | 1.18e+03
  ep_rew_mean
                      | 1.87e+03
time/
  fps
                     | 120
                    | 1519
| 6446
| 777728
   iterations
  time_elapsed
  total_timesteps
train/
  approx kl
                     0.013961018
                     0.0258
  clip_fraction
  clip_range
                    | 0.2
  entropy_loss | -1.07
explained_variance | 0.836
                     l 1e-06
   learning_rate
                     | 63.8
   n updates
                     | 15180
   policy_gradient_loss | -0.00611
   value_loss | 198
rollout/
  ep_len_mean
                     | 1.18e+03
                    i 1.87e+03
  ep_rew_mean
time/
                      | 120
  fps
                     | 1520
  iterations
  time_elapsed
                    | 6450
| 778240
  total timesteps
train/
  approx kl
                      0.002714723
                     0.00566
   clip_fraction
                     | 0.2
   clip_range
   entropy_loss
                      | -1.1
   explained_variance | 0.786
  learning_rate
                    | 1e-06
   loss
                    | 15190
   n_updates
   policy_gradient_loss | -0.00176
   value_loss | 335
rollout/
                    | 1.18e+03
  ep_len_mean
  ep_rew_mean
                     | 1.86e+03
time/
                      | 120
                     | 1521
  iterations
   time_elapsed
                      | 6454
   total_timesteps
                      | 778752
```

```
train/
                       0.019021632
   approx kl
   clip fraction
                      0.0668
   clip_range
                      0.2
                      | -1
   entropy_loss
   explained_variance | 0.761
   learning_rate | 1e-06
                      | 63.1
                     | 15200
   n updates
   policy_gradient_loss | -0.0119
   value_loss | 243
rollout/
                        1.18e+03
   ep len mean
                      | 1.86e+03
  ep rew mean
time/
                      | 120
  fps
   iterations
                      | 1522
   time_elapsed
                      | 6458
  total_timesteps
                      | 779264
train/
                      | 0.010193764
   approx kl
   clip_fraction
                      | 0.0441
   clip range
                      0.2
                      | -1.09
   entropy_loss
   explained_variance | 0.753
                      | 1e-06
   learning_rate
                      | 213
   loss
                      | 15210
   n_updates
   policy_gradient_loss | -0.00811
   value_loss | 751
rollout/
                       | 1.18e+03
  ep_len_mean
   ep_rew_mean
                     | 1.86e+03
time/
  fps
                      | 120
                      | 1523
  iterations
                     | 6462
   time_elapsed
  total_timesteps
                     | 779776
train/
                      0.0065538445
  approx kl
   clip_fraction
                      | 0.0271
  clip_range
entropy_loss
                      0.2
                      | -0.978
   explained_variance | 0.849
                      | 1e-06
   learning_rate
   loss
                      | 49.1
   n_updates
                       | 15220
   policy_gradient_loss | -0.00311
   value loss
                      | 156
  ep_len_mean
                     | 1.18e+03
  ep_rew_mean
                      | 1.86e+03
time/
                       120
  fps
                      | 1524
   iterations
                      | 6467
   time elapsed
  total timesteps
                      | 780288
train/
                      | 0.0007640779
   approx_kl
   clip_fraction
                      | 0
                      | 0.2
   clip_range
   entropy_loss
                      | -0.882
   explained_variance | 0.878
   learning_rate
                      | 1e-06
                       37.3
   loss
   n updates
                      | 15230
   policy_gradient_loss | -0.000884
   value loss
                       | 143
rollout/
  ep len mean
                      | 1.19e+03
  ep_rew_mean
                      | 1.88e+03
time/
                      | 120
  fps
   iterations
                       | 1525
                       | 6472
   time_elapsed
```

total timesteps	780800
train/	
approx_kl clip fraction	0.0034274766 0.0348
clip_range	0.2
entropy_loss	-0.912
<pre> explained_variance learning_rate</pre>	0.864 1e-06
loss	37.1
n_updates	15240 -0.00361
<pre>policy_gradient_loss value_loss</pre>	-0.00361
rollout/	
ep_len_mean	1.19e+03
ep_rew_mean time/	1.88e+03
fps	120
iterations	1526
<pre> time_elapsed total timesteps</pre>	6476 781312
train/	
approx_kl	0.012829345
<pre> clip_fraction clip range</pre>	0.0633 0.2
entropy_loss	-0.874
explained_variance	0.848
<pre> learning_rate loss</pre>	1e-06 46
n_updates	15250
<pre>policy_gradient_loss value loss</pre>	-0.00683 232
vatue_toss	232
L ==11=::+/	
rollout/ ep len mean	
ep_rew_mean	1.88e+03
time/ fps	
iterations	1527
time_elapsed	6480
<pre> total_timesteps train/</pre>	781824
approx_kl	0.0076373955
clip_fraction	0.0549
<pre> clip_range entropy loss</pre>	0.2 -0.706
explained_variance	0.907
! _ !	1e-06 26.6
	26.6 15260
policy_gradient_loss	
· —	75.6
rollout/ ep_len_mean	 1.19e+03
ep_ten_mean ep_rew_mean	1.19e+03 1.88e+03
time/	
fps iterations	120 1528
time_elapsed	6484
total_timesteps	782336
train/ approx kl	 0.002222882
clip_fraction	0.00703
clip_range	0.2
<pre> entropy_loss explained_variance</pre>	-0.736 0.678
learning_rate	l 1e-06
loss n updates	297 15270
. = .	0.000641
value_loss	560
rollout/	I I
ep_len_mean	1.19e+03
ep_rew_mean time/	1.88e+03
fps	120
iterations	1529

```
time elapsed
                      | 6488
                      | 782848
  total_timesteps
train/
                      0.00095135544
  approx_kl
  clip fraction
                     0.2
  clip_range
                     i -0.623
  entropy loss
  explained_variance | 0.907
                     l 1e-06
  learning_rate
                      | 40.1
  loss
                     | 15280
  n updates
  policy_gradient_loss | -0.00103
                     | 141
  value loss
rollout/
  ep len mean
                     1.89e+03
  ep rew mean
time/
                      | 120
  fps
  iterations
                     | 1530
  time_elapsed
                    | 6493
  total_timesteps
                    | 783360
train/
  approx kl
                     0.0008837357
  clip_fraction
                     | 0.2
  clip range
  entropy_loss
                      | -0.63
  explained variance | 0.853
                     | 1e-06
  learning_rate
                      | 97.7
  n updates
                      15290
  policy gradient loss | -0.00185
  value_loss | 216
                    | 1.2e+03
  ep_len_mean
  ep_rew_mean
                    | 1.89e+03
time/
                     | 120
                    | 1531
  iterations
                   | 6497
  time_elapsed
  total_timesteps
                     783872
                     0.0030974795
  approx kl
  clip_fraction
                     0.0117
  clip range
                     0.2
  entropy_loss
                     | -0.748
  explained_variance | 0.718
  learning_rate
                     | 1e-06
                     | 158
  loss
  n updates
                     | 15300
  policy_gradient_loss | -0.00103
             | 559
  value_loss
rollout/
                     | 1.19e+03
  ep_len_mean
  ep_rew_mean
                    1.88e+03
time/
                     120
  fps
                     | 1532
  iterations
  time elapsed
                    | 784384
  total_timesteps
train/
                     0.0057964996
  approx_kl
  clip_fraction
                     | 0.0377
  clip_range
                     | 0.2
  entropy_loss
                     | -0.565
  explained_variance | 0.915
  learning_rate
                     | 1e-06
                      | 54.3
  loss
                      15310
  n updates
  policy gradient loss | -0.0056
  value loss
                      | 1.19e+03
  ep len mean
  ep_rew_mean
                      | 1.87e+03
time/
                      | 120
 fps
```

```
iterations
                       | 1533
   time_elapsed
                         6505
   total timesteps
                         784896
train/
                       0.00034673244
   approx kl
   clip_fraction
                       | 0.000391
   clip_range
entropy_loss
                       0.2
                       | -0.44
   explained variance | 0.719
   learning_rate
                       | 1e-06
                       | 361
   loss
   n_updates
                       | 15320
   policy_gradient_loss | 0.00162
   value_loss
                       | 457
   ep len mean
                         1.19e+03
   ep rew mean
                       1.87e+03
time/
                       | 120
  fps
                        1534
   iterations
   time elapsed
                         6509
   total_timesteps
                       | 785408
                       | 0.0002730745
   approx_kl
   clip fraction
   clip_range
                       0.2
   entropy loss
                       -0.49
   explained_variance
                      0.866
   learning_rate
                         1e-06
   1055
                       1 106
   n_updates
                       | 15330
   policy_gradient_loss | 0.000589
   value loss
                       | 357
rollout/
   ep_len_mean
                       | 1.18e+03
   ep_rew_mean
                       | 1.87e+03
time/
   fps
                       | 120
                       | 1535
   iterations
                       | 6514
   time elapsed
   total_timesteps
                       | 785920
train/
                       0.0020963685
   approx_kl
   clip fraction
                      0.00605
   clip_range
                       0.2
                       | -0.482
   entropy_loss
   explained_variance | 0.735
   learning_rate
                       | 1e-06
   loss
                       | 107
   n updates
                       | 15340
   policy_gradient_loss | -0.00155
   value loss
rollout/
                       | 1.18e+03
   ep len mean
   ep_rew_mean
                       | 1.87e+03
time/
                       | 120
   fps
   iterations
                       | 1536
                       | 6518
   time_elapsed
   total_timesteps
                       786432
train/
   approx kl
                       | 0.0014605318
   clip_fraction
                       | 0.00176
   clip range
                       0.2
   entropy_loss
                       | -0.46
   explained variance
                      | 0.532
   learning_rate
                       | 1e-06
                       1 440
   n_updates
                       | 15350
   policy_gradient_loss | -0.002
   value loss
                       | 1.17e+03
   ep_len_mean
   ep_rew_mean
                       | 1.86e+03
time/
```

```
fps
                      | 120
                      | 1537
   iterations
   time_elapsed
                      6522
   total_timesteps
                      | 786944
train/
                      | 0.0034758672
   approx kl
   clip fraction
                      | 0.0312
  clip_range
entropy_loss
                      0.2
                     | -0.335
   explained_variance | 0.844
   learning_rate | 1e-06
                      | 28.1
   loss
                      | 15360
   n updates
   policy_gradient_loss | -0.00531
   value_loss | 78.5
rollout/
   ep len mean
                        1.17e+03
  ep_rew_mean
                      | 1.86e+03
time/
                      | 120
  fps
   iterations
                      | 1538
   time elapsed
                      | 6526
                     787456
  total timesteps
train/
  approx kl
                     0.0011795745
                      0.00977
   clip_fraction
   clip range
                     0.2
  entropy_loss | -0.41
explained_variance | 0.587
                      l 1e-06
   learning_rate
                      | 337
   n updates
                      | 15370
   policy gradient loss | -0.00114
   value_loss | 679
rollout/
  ep_len_mean
                      | 1.18e+03
  ep_rew_mean
                     | 1.87e+03
time/
                      | 120
                      | 1539
  iterations
                    | 6530
| 787968
  time_elapsed
  total timesteps
train/
                      0.00091202173
  approx kl
                     | 0.000586
   clip_fraction
                     | 0.2
   clip_range
   entropy_loss
                      | -0.329
   explained_variance | 0.703
   learning_rate
                     | 1e-06
                      | 40.1
   loss
                      i 15380
   n updates
   policy_gradient_loss | -0.00169
   value_loss | 110
rollout/
                     | 1.17e+03
   ep_len_mean
  ep_rew_mean
                     1.86e+03
time/
                      120
                     | 1540
   iterations
                    | 6535
   time elapsed
   total_timesteps
                      | 788480
train/
                      | 0.001735946
  approx_kl
   clip fraction
                     0.00547
   clip_range
                      0.2
   entropy_loss
                      | -0.384
   explained variance | 0.849
   learning rate
                      l 1e-06
                      | 69.8
   loss
   n_updates
                      | 15390
   policy_gradient_loss | -0.00152
rollout/
  ep len mean
                     | 1.17e+03
                      | 1.86e+03
   ep_rew_mean
```

```
time/
                        120
   fps
   iterations
                        1541
                        6539
   time_elapsed
                      788992
   total_timesteps
train/
                        0.00033139042
   approx kl
   clip_fraction
                      | 0.000977
   clip range
                      0.2
   entropy_loss
                      | -0.289
   explained_variance | 0.5
   learning_rate
                      | 1e-06
                      | 63.7
   loss
                      | 15400
   n_updates
   policy_gradient_loss | -0.00109
                      791
   value_loss
rollout/
                      | 1.17e+03
  ep_len_mean
                    | 1.86e+03
  ep_rew_mean
time/
                      | 120
  fps
                      1542
  iterations
                     | 6543
   time elapsed
  total_timesteps
                     789504
train/
                      | 0.0015820571
  approx_kl
   clip fraction
                      0.00605
                      0.2
  clip_range
entropy_loss
                      | -0.403
   explained_variance | 0.868
                      | 1e-06
   learning_rate
   loss
                      1 33.4
                      | 15410
   n updates
   policy_gradient_loss | -0.00144
   value loss
  ep_len_mean
                      | 1.17e+03
  ep_rew_mean
                     | 1.86e+03
time/
  fps
                      i 120
  iterations
                      | 1543
                      | 6548
   time elapsed
   total_timesteps
                      790016
train/
                      0.00086379936
   approx kl
                     0.0209
   clip_fraction
   clip_range
                      0.2
                      | -0.398
   entropy_loss
   explained_variance | 0.662
                     | 1e-06
   learning_rate
                      | 477
   loss
                      15420
   n updates
   policy_gradient_loss | -0.001
   value loss
                      | 711
rollout/
                     1.17e+03
  ep len mean
   ep rew mean
                      | 1.86e+03
time/
                      | 120
  fps
                     | 1544
   iterations
   time_elapsed
                      | 6553
  total_timesteps
                      | 790528
train/
   approx kl
                      0.0036780464
                     | 0.0133
   clip_fraction
   clip range
                     0.2
   entropy_loss
                      | -0.438
   explained variance | 0.745
                      l 1e-06
   learning_rate
                      | 82.7
                      | 15430
   n updates
   policy gradient loss | -0.000941
   value_loss
rollout/
                      | 1.18e+03
  ep_len_mean
```

```
ep rew mean
                       | 1.86e+03
 time/
                        120
    fps
                       | 1545
    iterations
                       | 6557
    time elapsed
    total_timesteps
                       | 791040
 train/
                       0.005008661
    approx_kl
    clip fraction
                      0.0492
                      | 0.2
    clip_range
    entropy_loss
                      | -0.517
    explained_variance | 0.89
                       l 1e-06
    learning_rate
                       | 36.4
    loss
    n updates
                       15440
    policy gradient loss | -0.00542
    value loss
                       | 110
 rollout/
    ep len mean
                       | 1.18e+03
                       | 1.86e+03
    ep_rew_mean
 time/
                       120
   fps
                      | 1546
    iterations
    time_elapsed
                     | 6561
    total timesteps
                       | 791552
 train/
    approx kl
                      0.0024638814
                      0.00488
    clip_fraction
    clip_range
entropy_loss
                      0.2
                      -0.626
    explained variance | 0.897
    learning_rate | 1e-06
    loss
                      | 62.2
                       | 15450
    n_updates
    policy_gradient_loss | -0.000517
               | 211
    value_loss
 rollout/
                     | 1.18e+03
    ep len mean
    ep rew mean
                       | 1.87e+03
 time/
                       | 120
   fps
                      1547
    iterations
                     | 6565
| 792064
    time_elapsed
    total timesteps
 train/
                      | 0.00024898
    approx kl
                      | 0.000391
    clip_fraction
                      0.2
    clip range
                      | -0.659
    entropy_loss
    explained variance | 0.898
                       | 1e-06
    learning_rate
                       48.8
                      | 15460
    n_updates
    policy_gradient_loss | -0.000834
    value_loss | 95.3
 rollout/
                      | 1.18e+03
    ep len mean
                     1.87e+03
    ep rew mean
 time/
                       120
   fps
                       | 1548
    iterations
    time elapsed
                     6569
    total_timesteps
                     | 792576
 train/
                       0.0028893794
    approx_kl
    clip fraction
                      0.00879
    clip range
                      | 0.2
    entropy loss
                       | -0.792
    explained_variance | 0.605
    learning_rate
                       le-06
                       | 1.24e+03
    loss
    n_updates
    policy_gradient_loss | 0.00115
    value loss | 1.19e+03
| rollout/
```

```
ep len mean
                       | 1.18e+03
   ep_rew_mean
                       | 1.87e+03
time/
                       | 120
   fps
   iterations
                       1549
   time_elapsed
                      | 6574
   total timesteps
                     | 793088
train/
                       | 0.00083807786
   approx kl
                      | 0.00371
   clip_fraction
                      | 0.2
   clip range
   entropy_loss
                      | -0.702
   explained variance | 0.862
   learning_rate
                     | 1e-06
   loss
   n_updates
                       15480
   policy gradient loss | -0.000451
   value_loss | 206
rollout/
                      | 1.18e+03
   ep_len_mean
   ep_rew_mean
                     | 1.87e+03
time/
                      | 120
  iterations | 1550
time_elapsed | 6578
total_timesteps | 793600
train/
                      0.0011714961
   approx_kl
                     0.000586
   clip fraction
   clip_range
entropy_loss
                     | -0.801
   explained_variance | 0.832
   learning_rate | 1e-06
                      | 388
   loss
   n updates
                     15490
   policy_gradient_loss | 4.52e-05
   value_loss | 631
rollout/
                    | 1.17e+03
| 1.86e+03
   ep len mean
   ep_rew_mean
time/
  fps
                       120
                      | 1551
   iterations
                     | 6582
| 794112
   time elapsed
   total_timesteps
train/
                      0.007954836
   approx_kl
                     0.0443
   clip_fraction
                     0.2
   clip_range
entropy_loss
   entropy_loss | -0.633
explained_variance | 0.786
                      l 1e-06
   learning_rate
                      | 79.9
   loss
   n updates
                       | 15500
   policy_gradient_loss | -0.00291
   value_loss | 201
rollout/
   ep_len_mean
                      1.17e+03
                     1.86e+03
   ep rew mean
time/
                       | 120
  fps
   iterations
                      | 1552
                     | 6586
   time_elapsed
   total_timesteps
                      | 794624
train/
   approx kl
                      0.007526449
   clip_fraction
                     | 0.0377
                     | 0.2
   clip range
                      | -0.645
   entropy_loss
   explained variance | 0.967
                       | 1e-06
   learning_rate
                       | 24.9
   loss
   n_updates
                       | 15510
   policy_gradient_loss | -0.00328
                     | 130
   value_loss
```

```
rollout/
                        1.17e+03
  ep len mean
  ep_rew_mean
                      | 1.86e+03
time/
                      1 120
  fps
                       1553
  iterations
  time elapsed
                        6591
  total_timesteps
                      | 795136
                      0.00065403
  approx_kl
  clip fraction
                      0.000781
  clip_range
                      0.2
  entropy loss
                      | -0.455
  explained variance | 0.613
  learning rate
                      l 1e-06
  loss
                      | 159
  n updates
                      15520
  policy_gradient_loss | -0.000594
  value loss | 586
rollout/
  ep len mean
                      | 1.18e+03
  ep_rew_mean
                      | 1.87e+03
time/
                      | 120
  fps
                      | 1554
  iterations
                      | 6595
  time elapsed
  total_timesteps
                      795648
train/
                      0.0012890826
  approx_kl
                     0.000781
  clip_fraction
  clip_range
                     0.2
  entropy_loss
                      | -0.633
  explained variance | 0.908
                      l 1e-06
  learning_rate
  loss
                      | 107
                      | 15530
  n updates
  policy_gradient_loss | -0.00098
  value loss
                      | 153
rollout/
                      | 1.18e+03
  ep len mean
  ep rew mean
                      | 1.87e+03
time/
                      | 120
  fps
                     | 1555
  iterations
  time_elapsed
                    | 6599
  total timesteps
                      796160
train/
  approx kl
                      0.0029092568
                      | 0.0127
  clip_fraction
  clip_range
entropy_loss
                      0.2
                      | -0.528
  explained variance | 0.925
                      | 1e-06
  learning_rate
  loss
                      | 36.5
                      | 15540
  n_updates
  policy_gradient_loss | -0.00304
                      | 168
  value_loss
                      | 1.17e+03
  ep_len_mean
  ep_rew_mean
                      1.86e+03
time/
                      | 120
  iterations
                       1556
  time elapsed
                        6603
                      | 796672
  total_timesteps
                      | 0.0012554254
  approx_kl
  clip fraction
                      0.00313
  clip_range
                      0.2
  entropy loss
                      | -0.515
  explained_variance | 0.886
  learning_rate
                      | 1e-06
                      31.1
  n_updates
                      | 15550
  policy_gradient_loss | -0.000324
  value loss | 99
```

```
rollout/
                        1.17e+03
  ep len mean
   ep_rew_mean
                      | 1.86e+03
time/
                      | 120
  fps
                       1557
   iterations
   time elapsed
                      | 6607
  total_timesteps
                     797184
train/
                      | 0.001911178
  approx kl
   clip_fraction
                      | 0.017
  clip range
                      0.2
   entropy_loss
                      | -0.5
   explained variance | 0.949
                      l 1e-06
  learning_rate
                      31.4
                      | 15560
   n_updates
   policy gradient loss | -0.00118
   value_loss | 112
rollout/
   ep_len_mean
                       1.17e+03
  ep_rew_mean
                      | 1.86e+03
time/
                      | 120
                      | 1558
  iterations
  time elapsed
                     6611
                     | 797696
  total_timesteps
                      0.0025775072
  approx kl
                     | 0.00977
   clip fraction
   clip_range
                     | 0.2
   entropy loss
                      | -0.502
   explained_variance | 0.644
   learning_rate
                      | 1e-06
                      | 45.4
  loss
   n_updates
                      | 15570
   policy_gradient_loss | -0.00235
                      | 137
   value_loss
rollout/
  ep len mean
                      | 1.17e+03
  ep_rew_mean
                     | 1.86e+03
time/
  fps
                      120
                     | 1559
  iterations
                    | 6616
   time elapsed
   total_timesteps
                      | 798208
train/
                      | 0.0028330237
  approx_kl
                     | 0.0184
   clip fraction
  clip_range
entropy_loss
                      0.2
                      | -0.614
   explained_variance | 0.716
   learning_rate
                     | 1e-06
   loss
                      I 212
   n updates
                      | 15580
   policy_gradient_loss | -0.000321
   value loss
                      | 648
                     | 1.17e+03
  ep_len_mean
                      | 1.85e+03
  ep_rew_mean
time/
                      | 120
  fps
                        1560
   iterations
```

time_elapsed

clip range

entropy_loss
explained variance

learning_rate

policy_gradient_loss | -0.00166

approx_kl
clip_fraction

loss

n_updates

value_loss

train/

total_timesteps

| 6620

0.2

| 0.871

| 1e-06

97.6

| 15590

| 154

| 798720

| 0.000195

0.0011115116

rollout/ ep_len_mean | 1.17e+03 ep_rew_mean | 1.85e+03 time/ fps | 120 | 1561 iterations time elapsed | 6624 total_timesteps | 799232 train/ | 0.001353638 approx_kl 0.00684 clip_fraction clip_range
entropy_loss | 0.2 entropy_loss | -0.529 explained_variance | 0.424 | 1e-06 learning rate | 589 loss n updates | 15600 policy_gradient_loss | -0.0015 value_loss | 918 ep_len_mean ep_rew_mean | 1.16e+03 | 1.85e+03 time/ | 120 fps iterations time_elapsed 6628 799744 total timesteps train/ 0.0019084841 approx_kl | 0.00215 clip_fraction 0.2 clip_range entropy_loss | -0.526 explained variance | 0.859 learning_rate | 1e-06 loss | 46.3 n_updates 15610 policy_gradient_loss | -0.00196 value_loss | 143 ep_len_mean | 1.16e+03 ep_rew_mean | 1.85e+03 time/ | 120 fps | 1563 iterations time_elapsed | 6633 total_timesteps | 800256 0.0012180277 0.000781 0.2 approx kl clip_fraction clip range entropy_loss | -0.612 explained_variance | 0.695 learning_rate | 1e-06 loss | 165 n_updates | 15620 policy gradient loss | 0.000154 value_loss | 1e+03 rollout/ ep_len_mean | 1.16e+03 ep_rew_mean | 1.84e+03 time/ | 120 fps | 1564 iterations time elapsed | 6638 | 800768 total_timesteps train/ approx kl 0.0023479084 clip fraction 0.00195 clip_range
entropy_loss 0.2 | -0.528 explained_variance | 0.888 | 1e-06 learning_rate

| 70.1

policy_gradient_loss | -0.000564

15630

loss n updates

value_loss	183
rollout/	
ep_len_mean	1.16e+03
ep_rew_mean	1.84e+03
time/	
fps iterations	120 1565
time elapsed	1505 6642
total timesteps	801280
train/	
i approx_kl	0.0010901492
clip_fraction	0.0043
clip_range	0.2
<pre> entropy_loss explained variance</pre>	-0.413 0.592
learning rate	1e-06
l loss	147
n_updates	15640
policy_gradient_loss	-0.00168
value_loss	795
L rollout/	
rollout/ ep len mean	 1.15e+03
ep_ten_mean	1.13e+03 1.83e+03
time/	
fps	120
iterations	1566
time_elapsed	6646
total_timesteps	801792
train/	
approx_kl clip_fraction	0.0033647733
clip_range	1 0.2
entropy_loss	-0.618
explained_variance	0.694
learning_rate	1e-06
loss	216
n_updates	15650
<pre>policy_gradient_loss value loss</pre>	8.6e-05 510
vacue_coss	
rollout/	
ep_len_mean	1.15e+03
ep_rew_mean	1.83e+03
time/ fps	
iterations	120 1567
time elapsed	6650
total_timesteps	802304
train/	
approx_kl	0.0009787699
clip_fraction	0.00293
clip_fraction clip_range	0.00293
clip_fraction clip_range entropy_loss	0.00293
clip_fraction clip_range	0.00293 0.2 -0.462
clip_fraction clip_range entropy_loss explained_variance	0.00293
clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates	0.00293
clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss	0.00293
clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss	0.00293
clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss	0.00293
clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss	0.00293
clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/	0.00293
clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss	0.00293
clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/	0.00293
clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps	0.00293
clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations	0.00293
clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed	0.00293
clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps	0.00293
clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed	0.00293
clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction	0.00293
clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range	0.00293
clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss	0.00293
clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance	0.00293
clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate	0.00293
clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance	0.00293

policy_gradient_loss value_loss	-0.003 142
rollout/	l I
ep len mean	1.15e+03
ep rew mean	1.83e+03
time/	j j
fps	120
iterations	1569
time_elapsed	6659
total_timesteps	803328
train/	
approx_kl clip_fraction	0.016
clip_range	0.2
	-0.401
	0.634
learning_rate	le-06
loss	373
n_updates	15680
1 , , , , , , ,	-0.00351
value_loss	519
rollout/	
ep_len_mean	
ep_cen_mean	1.13e+03
time/	1.050.05
fps	1 120
iterations	1570
time elapsed	6663
total_timesteps	803840
train/	
approx_kl	0.0010573647
clip_fraction	0
clip_range	0.2
entropy_loss	-0.592
explained_variance	0.895 1e-06
learning_rate loss	16-00 87
n updates	15690
. = .	-0.00246
	212
rollout/	
ep_len_mean	1.15e+03
ep_rew_mean	1.83e+03
time/	
fps iterations	120
time elapsed	1571 6667
total timesteps	804352
train/	004332
approx kl	 0.0002066365
clip_fraction	0
clip_range	0.2
entropy_loss	-0.513
explained_variance	0.897
learning_rate	l 1e-06
loss	71.4
n_updates	15700
policy_gradient_loss	-0.000521
value_loss	178
rollout/	
ep len mean	
ep_cen_mean	1.13e+03
time/	
l fps	i 120 i

n_updates policy_gradient_loss value_loss	15710 0.00344 829
rollout/ ep_len_mean	1.14e+03
ep_rew_mean	1.84e+03
time/ fps	
iterations	1573
time_elapsed	6675
total_timesteps train/	805376
approx_kl	0.00056263676
clip_fraction	0 j
clip_range	0.2
<pre> entropy_loss explained variance </pre>	-0.511 0.55
learning_rate	1e-06
loss	853
<pre> n_updates policy_gradient_loss </pre>	15720 0.000697
	1.11e+03
rollout/	
ep len mean	
ep_rew_mean	1.84e+03
time/	
fps iterations	120 1574
time_elapsed	6680
total_timesteps	805888
train/ approx kl	 0.0011793071
clip_fraction	0.0011793071
clip_range	0.2
entropy_loss	-0.408
<pre> explained_variance learning rate </pre>	0.716 1e-06
loss	377
n_updates	15730
<pre>policy_gradient_loss value_loss</pre>	-0.00239
rollout/ ep len mean	
ep_rew_mean	1.83e+03
time/	ļ <u> </u>
fps iterations	120 1575
time elapsed	6684
total_timesteps	806400
train/	 0.0008654491
approx_kl clip_fraction	0.000391
clip_range	0.2
entropy_loss	-0.503 0.753
<pre> explained_variance learning rate </pre>	1e-06
loss	44.1
n_updates	15740
<pre>policy_gradient_loss value loss</pre>	0.00241 187
vatue_toss	
rollout/ ep len mean	 1.13e+03
ep_rew_mean	1.83e+03
time/	į
fps	120
<pre> iterations time_elapsed </pre>	1576 6688
total_timesteps	806912
train/	0.003354536
approx_kl clip fraction	0.0023545264 0.00859
clip_range	0.2
entropy_loss	-0.512
<pre> explained_variance learning rate </pre>	0.577 1e-06
I ccarning_rate	TC-00

loss	173
n updates	15750
policy_gradient_loss	
	849
1 14440_1000	
rollout/	l l
ep_len_mean	1.12e+03
ep rew mean	1.81e+03
time/	i i
fps	120
iterations	1577
time elapsed	6692
total timesteps	807424
train/	i i
approx kl	0.0012991481
clip_fraction	0.00156
clip_range	0.2
	-0.617
explained_variance	0.605
learning rate	1e-06
loss	253
n_updates	15760
policy_gradient_loss	-0.00108
value_loss	575
rollout/	
ep_len_mean	1.12e+03
ep_rew_mean	1.81e+03
time/	į į
fps	120
iterations	1578
time elapsed	6697
total timesteps	807936
train/	j j
approx kl	0.0019282887
clip_fraction	0.0363
clip range	0.2
entropy_loss	-0.533
explained variance	0.878
learning_rate	le-06
loss	68.4
	. 15770
n updates	15770
<pre> n_updates policy_gradient_loss value loss</pre>	15770
policy_gradient_loss	-0.00388
policy_gradient_loss	-0.00388
policy_gradient_loss	-0.00388
policy_gradient_loss value_loss	-0.00388
policy_gradient_loss value_loss rollout/	-0.00388
policy_gradient_loss value_loss rollout/ ep_len_mean	-0.00388
policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean	-0.00388
policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations	-0.00388
policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed	-0.00388
policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations	-0.00388
policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed	-0.00388
policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl	-0.00388
policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction	-0.00388
policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range	-0.00388
policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss	-0.00388
policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range	-0.00388
policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss	-0.00388
policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance	-0.00388
policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates	-0.00388
policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss	-0.00388
policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates	-0.00388
policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss	-0.00388
policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss	-0.00388
policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss	-0.00388
policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean	-0.00388
policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss	-0.00388
policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/	-0.00388
policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean	-0.00388
policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/	-0.00388
policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed	-0.00388
policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations	-0.00388
policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed	-0.00388
policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps	-0.00388
policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/	-0.00388
policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl	-0.00388
policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction	-0.00388
policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range	-0.00388

policy_gradient_loss	1e-06
rollout/	
ep_len_mean	1.12e+03
ep_rew_mean time/	1.81e+03
fps	
iterations	1581
time elapsed	6709
total timesteps	809472
train/	j j
approx_kl	0.0043657236
clip_fraction	0.0426
clip_range	0.2
entropy_loss	-0.662
<pre> explained_variance learning_rate</pre>	0.801 1e-06
loss	16-00 118
•	15800
policy_gradient_loss	
	251
rollout/	
ep_len_mean	1.12e+03
ep_rew_mean	1.81e+03
time/	
fps iterations	120 1582
time elapsed	6713
total timesteps	809984
train/	
approx_kl	0.0042429483
clip_fraction	0.0367
clip_range	0.2
entropy_loss	-0.736
explained_variance	0.9
learning_rate	1e-06
loss n updates	142 15810
policy_gradient_loss	
	263
rollout/	
ep_len_mean	1.12e+03
ep_rew_mean	1.81e+03
time/	
fps iterations	120 1583
time elapsed	6719
total timesteps	810496
train/	
approx_kl	0.008707467
clip_fraction	0.0785
clip_range	0.2
entropy_loss	-0.65
explained_variance	0.852
learning_rate loss	1e-06 26.7
n updates	15820
	-0.00712
value loss	101
rollout/	
ep_len_mean	1.12e+03
ep_rew_mean	1.81e+03
time/ fps	
iterations	1584
time_elapsed	6723
total_timesteps	811008
train/	
approx_kl	0.0021703648
clip_fraction	0.000781
clip_range	0.2
entropy_loss	-0.624

learning_rate loss n_updates policy_gradient_loss	0.614
rollout/	l l
ep_len_mean	1.11e+03
ep_rew_mean	1.8e+03
time/ fps	
iterations	1585
time_elapsed	6727
<pre> total_timesteps train/</pre>	811520
approx kl	
clip_fraction	0.0387
1 1 1 3	0.2
· : : : : : : : : : : : : : : : : : : :	-0.594 0.714
· · · · · · · · · · · · · · · · · · ·	l 1e-06
loss	184
n_updates	15840
<pre>policy_gradient_loss value loss</pre>	-0.00147 498
rollout/	 1.11e+03
<pre> ep_len_mean ep rew mean</pre>	1.11e+05
time/	
fps	120
iterations	1586 6731
<pre> time_elapsed total timesteps</pre>	812032
train/	
approx_kl	0.0019349176
<pre> clip_fraction clip range</pre>	0.000977 0.2
entropy_loss	-0.591
explained_variance	0.781
learning_rate	l 1e-06
loss n updates	275 15850
	-0.000423
	714
rollout/	
ep_len_mean	1.11e+03
ep_rew_mean	1.8e+03
time/ fps	
iterations	1587
time_elapsed	6735
total_timesteps	812544
train/ approx kl	
clip_fraction	0.0244
clip_range	0.2
entropy_loss	-0.481
· · · · · · · · · · · · · · · · · · ·	0.407 1e-06
loss	304
	15860
· · · · · · · · · · · · · · · · · · ·	-0.00526 953
rollout/	
<pre> ep_len_mean ep rew mean</pre>	1.11e+03 1.8e+03
time/	
fps	120
iterations	1588 6740
<pre> time_elapsed total timesteps</pre>	6740 813056
train/	
approx_kl	0.005009681
clip_fraction	0.023 0.2
clip_range	0.2

<pre> entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss </pre>	-0.506 0.87 1e-06 46.9 15870 -0.00136 125
rollout/	
ep_len_mean	1.11e+03
ep_rew_mean	1.8e+03
time/ fps	1 120
iterations	1589
time elapsed	6744
total_timesteps	813568
train/	
approx_kl	0.0010599365
clip_fraction	0.00723 0.2
<pre> clip_range entropy_loss </pre>	0.2 -0.505
explained variance	0.776
learning rate	1e-06
loss	222
n_updates	15880
1 1 1 1 1	0.000382
value_loss	498
rollout/	1
ep_len_mean	1.1e+03
ep_rew_mean	1.79e+03
time/	
fps	120
iterations	1590 6748
<pre> time_elapsed total timesteps </pre>	814080
train/	014000
approx kl	0.0037460825
clip_fraction	0.0221
clip_range	0.2
entropy_loss	-0.457
explained_variance	0.826
learning_rate loss	1e-06 59.9
n updates	15890
policy gradient loss	
value_loss	185
mallau+/	
rollout/ ep len mean	
ep_rew_mean	1.78e+03
time/	
fps	120
iterations	1591
time_elapsed	6752
<pre> total_timesteps train/ </pre>	814592
approx kl	0.0010820215
clip_fraction	0.00332
clip_range	0.2
entropy_loss	-0.588
explained_variance	0.925
learning_rate	1e-06
loss n updates	83.1 15900
- : : : : : : : : : : : : : : : : :	0.00145
value loss	199
L rollout/	
rollout/ ep_len mean	
ep_ten_mean	1.1e+03 1.78e+03
time/	
fps	120
iterations	1592
time_elapsed	6757
total_timesteps	
	815104
train/	i
train/ approx_kl clip fraction	815104

· : · · · · · · · · · · · · · · · · · ·	0.2 -0.549 0.735 1e-06
loss n_updates policy_gradient_loss	133 15910
value_loss	432
rollout/	I
ep_len_mean ep_rew_mean time/	1.1e+03 1.79e+03
fps	120
iterations time_elapsed	1593 6761
total_timesteps train/	815616 I
approx_kl	0.009108323
· : - : · · · · · · · · · · · · · · · ·	0.0834 0.2
entropy_loss	-0.541
<pre> explained_variance learning_rate </pre>	0.853 1e-06
loss	
<pre> n_updates policy_gradient_loss </pre>	15920
value_loss	292
rollout/	
ep_len_mean	1.09e+03
ep_rew_mean time/	1.78e+03
fps	120
<pre> iterations time_elapsed </pre>	1594 6765
total_timesteps	816128
train/ approx kl	0.005395954
· · · · · · · · · · · · · · · · · · ·	0.0264
clip_range	0.2
<pre> entropy_loss explained_variance </pre>	-0.619 0.713
learning_rate	1e-06
loss n updates	294 15930
policy_gradient_loss	-0.00477
' – '	805
rollout/ ep_len_mean	1.09e+03
ep_rew_mean	1.78e+03
time/	120
fps iterations	120 1595
time_elapsed	6769
<pre> total_timesteps train/ </pre>	816640
approx_kl	0.0007582685
<pre> clip_fraction clip range </pre>	0.00273 0.2
entropy_loss	-0.521
<pre> explained_variance learning_rate </pre>	0.644 1e-06
loss	290
<pre> n_updates policy_gradient_loss </pre>	15940
	522
rollout/	
ep_len_mean	
ep_rew_mean time/	1.78e+03
fps	120
iterations time elapsed	1596 6773
total_timesteps	817152
train/	0.003313157
approx_kl	0.00331313/

```
clip_fraction
                      0.0187
                     0.2
   clip_range
   entropy_loss
                      | -0.557
   explained_variance | 0.932
   learning_rate
                     | 1e-06
                      | 68.1
              | 15950
   n updates
   policy_gradient_loss | -0.00359
   value_loss | 171
rollout/
  ep len mean
                      | 1.09e+03
                    | 1.78e+03
  ep_rew_mean
time/
                      | 120
  fps
  iterations
                     1597
                    | 6778
  time elapsed
   total timesteps
                     817664
train/
                      0.0022916696
  approx kl
   clip_fraction
                     | 0.000195
  clip_range
entropy_loss
                     0.2
                    -0.523
   explained variance | 0.84
                    | 1e-06
   learning_rate
                     | 88.5
                      | 15960
  n_updates
   policy_gradient_loss | -0.00128
   value_loss | 288
  ep_len_mean
                    | 996
  ep_rew_mean
                     | 1.76e+03
time/
  fps
                      | 120
                      | 1598
  iterations
   time_elapsed
                     | 6782
                    818176
  total_timesteps
                     | 0.0030946378
  approx_kl
   clip fraction
                     0.0299
                     0.2
   clip range
   entropy loss
                     | -0.58
   explained variance | 0.901
   learning_rate | 1e-06
  loss
                      42.3
                     | 15970
   n_updates
   policy_gradient_loss | -0.00873
   value_loss
rollout/
                     | 996
  ep_len_mean
  ep rew mean
                     | 1.76e+03
time/
  fps
                      | 120
                      | 1599
   iterations
   time elapsed
                      | 6786
  total_timesteps
                      | 818688
train/
                     0.00095988077
   approx_kl
   clip fraction
                    0.00293
   clip_range
                    | 0.2
   entropy_loss
                     | -0.651
   explained_variance | 0.925
   learning_rate
                      | 1e-06
                      96.6
   loss
   n updates
                      | 15980
   policy_gradient_loss | -0.000319
rollout/
                      993
  ep len mean
                      | 1.76e+03
  ep_rew_mean
time/
                      | 120
                      | 1600
   iterations
                      | 6790
  time_elapsed
   total timesteps
                      | 819200
train/
```

```
approx_kl
                      | 0.0011082318 |
   clip_fraction
                     | 0.00371
  clip_range
entropy_loss
                    | 0.2
                     | -0.504
   explained variance | 0.833
   learning_rate
                    | 1e-06
   loss
                      | 48.5
             | 15990
   n updates
   policy_gradient_loss | -0.00249
   value_loss | 137
rollout/
                    | 993
   ep len mean
                     1.76e+03
  ep rew mean
time/
                      120
                    | 1601
  iterations
  time_elapsed
                    | 6794
  total_timesteps
                      | 819712
train/
                     | 0.0021132168
  approx_kl
                     | 0.0277
   clip_fraction
  clip_range
entropy_loss
                     0.2
                    | -0.456
   explained_variance | 0.353
   learning_rate | 1e-06
                     | 538
   loss
   n_updates
                     16000
   policy_gradient_loss | -0.00169
   value_loss | 1.02e+03
rollout/
  ep len mean
                      | 1.76e+03
  ep_rew_mean
time/
                     | 120
  fps
   iterations
                     | 1602
  time_elapsed
                    6800
                    820224
  total_timesteps
train/
  approx_kl
                     | 0.0012169746
                     0.00898
   clip_fraction
  clip_range
                    | 0.2
  entropy_loss | -0.585
explained_variance | 0.749
   learning_rate
                     l 1e-06
                     | 61.6
                     | 16010
   n updates
   policy_gradient_loss | -0.000671
   value_loss | 160
rollout/
  ep_len_mean
                    | 1.76e+03
  ep_rew_mean
time/
                      | 120
  fps
                     | 1603
  iterations
  time_elapsed
                    | 6805
  total timesteps
                    820736
train/
  approx kl
                     0.001880455
   clip_fraction
                     0.00703
                     | 0.2
   clip_range
   entropy_loss
                      | -0.426
   explained_variance | 0.866
   learning_rate
                     | 1e-06
   loss
   n_updates
                     | 16020
   policy_gradient_loss | -0.00206
   value_loss | 60.7
rollout/
                    | 995
  ep_len_mean
  ep_rew_mean
                     | 1.76e+03
time/
                      | 120
  fps
                     | 1604
  iterations
   time elapsed
                      | 6809
   total_timesteps
                      821248
```

```
train/
                       0.0011514587
   approx kl
   clip fraction
                       0.0119
                       0.2
   clip_range
                       I -0.519
   entropy_loss
   explained_variance | 0.551
                      l 1e-06
   learning_rate
                       306
                      16030
   n updates
   policy_gradient_loss | -0.00134
   value_loss | 849
rollout/
   ep len mean
                      | 1.76e+03
   ep rew mean
time/
                       | 120
  fps
   iterations
                      1605
   time_elapsed
                       | 6814
  total_timesteps
                       | 821760
train/
                       | 0.0004910929
   approx kl
                      0.000977
   clip_fraction
   clip range
                      0.2
                       | -0.464
   entropy_loss
   explained variance | 0.785
   learning_rate
                       | 1e-06
                       39.6
   loss
                       | 16040
   n_updates
   policy_gradient_loss | 0.000414
                       | 104
   value_loss
rollout/
                       | 1e+03
  ep_len_mean
   ep_rew_mean
                     | 1.77e+03
time/
  fps
                      | 120
                      | 1606
  iterations
                     | 6818
   time_elapsed
  total_timesteps
                      | 822272
train/
                       0.0027700155
  approx kl
   clip_fraction
                      0.00742
  clip_range
entropy_loss
                       0.2
                      | -0.581
   explained variance | 0.928
   learning_rate
                       | 1e-06
                       | 28.8
   loss
   n_updates
                       | 16050
   policy_gradient_loss | -0.00277
   value loss
                       84.5
   ep_len_mean
                      | 1e+03
  ep_rew_mean
                      | 1.77e+03
time/
  fps
                       | 120
                       | 1607
   iterations
   time elapsed
                       6822
   total timesteps
                       822784
train/
                      0.0024800464
   approx_kl
                      0.00684
   clip_fraction
   clip_range
                       0.2
   entropy_loss
                       | -0.614
   explained_variance | 0.427
                        1e-06
   learning_rate
   loss
                       1 864
   n updates
                       | 16060
   policy_gradient_loss | 0.000783
   value loss
rollout/
   ep len mean
                       998
  ep_rew_mean
                       | 1.78e+03
time/
  fps
                       | 120
   iterations
                        1608
                       | 6826
   time_elapsed
```

<pre>total_timesteps</pre>	823296
train/	
approx_kl	0.0021513395
clip_fraction	0.00957
clip_range	0.2 -0.613
<pre> entropy_loss explained variance</pre>	0.583
learning_rate	l 1e-06
l loss	164
n_updates	16070
policy_gradient_loss	0.000554
value_loss	431
l rollout/	
rollout/ ep_len_mean	 998
ep_ten_mean	1.78e+03
time/	
fps	120
iterations	1609
time_elapsed	6830
total_timesteps	823808
train/	
approx_kl	0.005310105
clip_fraction clip range	0.0268 0.2
entropy_loss	0.2 -0.793
explained variance	0.861
learning rate	1e-06
loss	143
n_updates	16080
<pre>policy_gradient_loss</pre>	-0.000537
value_loss	377
l rollout/	
rollout/ ep len mean	l 998 l
ep_ten_mean ep_rew_mean	1.78e+03
time/	1.700.03
fps	120
iterations	1610
time_elapsed	6834
<pre>total_timesteps</pre>	824320
train/	
• • • =	0.0030189892
clip_fraction	0.026
clip_range	0.2 -0.649
	-0.049
	l 1e-06
•	48.8
n_updates	16090
<pre>policy_gradient_loss</pre>	
value_loss	144
L rollout/	
rollout/ ep len mean	
ep_ten_mean	1.78e+03
time/	
fps	120
iterations	1611
time_elapsed	6839
total_timesteps	824832
train/	
	0.004264487
approx_kl	'
clip_fraction	0.0123
clip_fraction clip_range	0.0123
clip_fraction clip_range entropy_loss	0.0123
clip_fraction clip_range entropy_loss	0.0123 0.2 -0.735
clip_fraction clip_range entropy_loss explained_variance	0.0123 0.2 -0.735
clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates	0.0123
clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss	0.0123 0.2 0.735 0.841 1e-06 75.3 16100 -0.0043
clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss	0.0123 0.2 0.735 0.841 1e-06 75.3 16100 -0.0043 137
clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss	0.0123 0.2 -0.735 0.841 1e-06 75.3 16100 -0.0043 137
clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss	0.0123 0.2 -0.735 0.841 1e-06 75.3 16100 -0.0043 137
clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss	0.0123 0.2 -0.735 0.841 1e-06 75.3 16100 -0.0043 137
clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss	0.0123 0.2 -0.735 0.841 1e-06 75.3 16100 -0.0043 137
clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean	0.0123 0.2 -0.735 0.841 1e-06 75.3 16100 -0.0043 137 -0.0043 127 1e+03
clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean	0.0123 0.2 -0.735 0.841 1e-06 75.3 16100 -0.0043 137 -0.0043 127 1e+03
clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/	0.0123 0.2 -0.735 0.841 1e-06 75.3 16100 -0.0043 137

```
time elapsed
                      | 6843
                      825344
  total_timesteps
train/
                      0.0013858508
  approx_kl
                      0.00898
  clip fraction
  clip_range
                      0.2
                      i -0.688
  entropy loss
  explained_variance | 0.513
                      le-06
  learning_rate
                      | 291
  loss
                      | 16110
  n updates
  policy_gradient_loss | 0.000207
  value loss
rollout/
  ep len mean
                      1.78e+03
  ep rew mean
time/
  fps
                      | 120
  iterations
                      | 1613
                    | 6847
  time_elapsed
  total_timesteps
                     | 825856
train/
  approx kl
                      0.006290745
                     | 0.0752
  clip_fraction
  clip range
                     0.2
  entropy_loss
                      | -0.684
  explained variance | 0.889
                     | 1e-06
  learning_rate
                      | 31.6
  n updates
                      16120
  policy gradient loss | -0.00432
  value_loss | 80.1
                     | 1e+03
  ep_len_mean
  ep_rew_mean
                     | 1.79e+03
time/
                      | 120
                     | 1614
  iterations
                    6851
  time_elapsed
                      826368
  total_timesteps
                      0.0026053623
  approx kl
  clip_fraction
                     | 0.00625
  clip range
                     0.2
  entropy_loss
                      | -0.839
  explained_variance | 0.443
  learning_rate
                      | 1e-06
                      | 250
  loss
  n updates
                      | 16130
  policy_gradient_loss | -0.00176
  value_loss | 1.01e+03
rollout/
  ep_len_mean
                      | 1.01e+03
  ep rew mean
                      | 1.8e+03
time/
                      120
  fps
                      | 1615
  iterations
  time elapsed
  total_timesteps
                     | 826880
train/
                      0.0040250984
  approx_kl
  clip_fraction
                      | 0.0391
  clip_range
                      0.2
  entropy_loss
                      | -0.608
  explained_variance | 0.839
  learning_rate
                      | 1e-06
                      | 137
  loss
                      16140
  n updates
  policy gradient loss | -0.00607
  value loss
  ep len mean
                      | 1.01e+03
                      | 1.8e+03
  ep_rew_mean
time/
                      | 120
  fps
```

iterations	1616
time elapsed	6860
total timesteps	827392
train/	i i
approx_kl	0.0015503542
clip_fraction	0.00547
clip_range	0.2
entropy_loss	-0.774
<pre> explained_variance </pre>	0.653
learning_rate	le-06
loss	207
n_updates	16150
<pre>policy_gradient_loss </pre>	-0.00176
value_loss	810
rollout/	
ep_len_mean	1.01e+03
ep_rew_mean	1.81e+03
time/	
fps	120
iterations	1617
time_elapsed	6864
total_timesteps	827904
train/	
approx_kl	0.0021172308
clip_fraction	0.0227
clip_range	0.2
entropy_loss	-0.679
explained_variance	0.887
learning_rate	1e-06
loss	32.7
n_updates	16160
policy_gradient_loss	
value_loss	125
l rollout/	
rollout/	
ep_len_mean	
ep_rew_mean	1.81e+03
time/	
fps	
iterations time elapsed	1618
	6868 828416
<pre> total_timesteps train/</pre>	020410
approx kl	 0.0014095829
clip fraction	0.0014033023 0.00156
clip_range	0.2
entropy_loss	-0.643
explained variance	0.74
learning rate	l 1e-06
l loss	304
n updates	16170
• = •	0.00102
	456
1 14145_1000	
rollout/	
ep_len_mean	1.01e+03
ep rew mean	1.81e+03
time/	j
fps	120
iterations	1619
time_elapsed	6872
total_timesteps	828928
train/	l İ
approx_kl	0.004676514
clip_fraction	0.0459
clip_range	0.2
entropy_loss	-0.563
explained_variance	0.918
learning_rate	1e-06
loss	44.4
n_updates	16180
<pre>policy_gradient_loss </pre>	
value_loss	100
rollout/	
rollout/ ep_len_mean	
ep_len_mean ep_rew_mean	
ep_len_mean	

```
fps
                      | 120
                      | 1620
   iterations
   time_elapsed
                      6877
                      829440
   total timesteps
train/
                      | 0.0009236345
   approx kl
   clip fraction
                     0.00117
  clip_range
entropy_loss
                      0.2
                     | -0.625
   explained_variance | 0.839
   learning_rate | 1e-06
   loss
                      | 56.5
   n updates
                      | 16190
   policy_gradient_loss | -0.00116
   value loss
rollout/
  ep len mean
                       1.02e+03
                      | 1.83e+03
  ep_rew_mean
time/
                      | 120
  fps
   iterations
                      | 1621
   time elapsed
                     | 6881
                    829952
  total timesteps
train/
                     | 0.0014592332
  approx kl
   clip_fraction
                     0.00527
   clip_range
                     0.2
                     | -0.622
   entropy_loss
   explained_variance | 0.901
   learning_rate
                      l 1e-06
                      | 107
   n updates
                      | 16200
   policy gradient loss | 0.00128
                      | 234
   value_loss
rollout/
                      | 1.02e+03
  ep_len_mean
  ep_rew_mean
                     | 1.83e+03
time/
                      | 120
                      | 1622
  iterations
  time_elapsed
                     | 6886
  total_timesteps
                     830464
train/
                      0.00398659
  approx kl
   clip_fraction
                     0.0223
                     0.2
   clip_range
   entropy_loss
                      | -0.613
   explained_variance | 0.856
   learning_rate
                     | 1e-06
   loss
                      94.8
                      | 16210
   n updates
   policy_gradient_loss | -0.00218
   value_loss
                      | 220
rollout/
                     | 1.03e+03
  ep_len_mean
  ep rew mean
                     1.84e+03
time/
                      120
                     | 1623
   iterations
                    | 6890
   time elapsed
   total_timesteps
                      | 830976
train/
                      | 0.0020320932
  approx_kl
   clip fraction
                     | 0.00391
   clip_range
                      0.2
   entropy loss
                     | -0.704
   explained variance | 0.87
   learning rate
                      l 1e-06
   loss
                      53.7
   n_updates
                      | 16220
   policy_gradient_loss | -0.00164
rollout/
  ep len mean
                     | 1.03e+03
                      | 1.84e+03
   ep_rew_mean
```

```
time/
                        120
   fps
   iterations
                        1624
                       i 6894
   time_elapsed
   total_timesteps
                       831488
train/
                        0.0012286329
   approx kl
                      | 0.00176
   clip fraction
   clip range
                      0.2
   entropy_loss
                      | -0.586
   explained_variance | 0.58
   learning_rate
                      | 1e-06
                      68.4
   loss
                      | 16230
   n_updates
   policy_gradient_loss | -0.000574
   value_loss
                      | 605
   ep_len_mean
                        1.03e+03
                      | 1.84e+03
  ep_rew_mean
time/
                      | 120
  fps
                      1625
  iterations
                      | 6899
   time elapsed
  total_timesteps
                      i 832000
train/
                      | 0.0030124185
  approx_kl
   clip fraction
                      0.0412
  clip_range
                      0.2
   entropy_loss
                      | -0.674
   explained_variance | 0.919
                      | 1e-06
   learning_rate
   loss
                       1 45.9
   n updates
                       | 16240
   policy_gradient_loss | -0.00585
   value loss
  ep_len_mean
                      | 1.04e+03
                      | 1.85e+03
  ep_rew_mean
time/
  fps
                       i 120
  iterations
                      | 1626
                      | 6903
   time elapsed
   total_timesteps
                      | 832512
train/
                      0.00092754094
  approx_kl
                     0.000781
   clip_fraction
   clip_range
                      0.2
                      | -0.637
   entropy_loss
   explained_variance | 0.779
                      i 1e-06
   learning_rate
   loss
                       | 136
   n updates
                      16250
   policy_gradient_loss | -0.0015
   value loss
                       | 474
rollout/
                      1.04e+03
   ep len mean
   ep rew mean
                      | 1.85e+03
time/
                      | 120
  fps
   iterations
                      | 1627
                      | 6907
   time_elapsed
  total_timesteps
                       | 833024
train/
   approx kl
                      0.0019970206
                      | 0.00391
   clip_fraction
   clip range
                      0.2
   entropy_loss
                      | -0.593
   explained variance | 0.827
   learning_rate
                       l 1e-06
                       | 108
                      | 16260
   n updates
   policy gradient loss | 1.09e-05
   value_loss
rollout/
                      | 1.04e+03
  ep_len_mean
```

```
ep rew mean
                       | 1.85e+03
 time/
                       120
    fps
                       | 1628
    iterations
                       | 6911
    time elapsed
    total_timesteps
                      | 833536
                       0.0027284017
    approx kl
                      0.00879
    clip fraction
    clip_range
entropy_loss
                      | 0.2
                       | -0.631
    explained_variance | 0.924
    learning_rate
                       | 1e-06
                       | 43.6
    loss
    n updates
                       16270
    policy_gradient_loss | -0.00186
    value loss
 rollout/
    ep len mean
                       | 1.04e+03
                       | 1.85e+03
    ep_rew_mean
 time/
                       120
   fps
    iterations
                      | 1629
                     6915
    time_elapsed
    total timesteps
                       | 834048
 train/
    approx kl
                       | 0.0021977248
                      | 0.0082
    clip_fraction
    clip_range
entropy_loss
                     0.2
-0.468
    explained variance | 0.818
    learning_rate | 1e-06
    loss
                       1 32.5
    n_updates
                       16280
    policy_gradient_loss | -0.00118
               | 111
    value_loss
 rollout/
                     | 1.04e+03
    ep len mean
    ep rew mean
                       | 1.85e+03
 time/
                       | 120
   fps
                       1630
    iterations
    time_elapsed
                     | 6920
| 834560
    total_timesteps
 train/
                       0.0007955892
    approx kl
                       0.0168
    clip_fraction
                      0.2
    clip range
                      | -0.489
    entropy_loss
    explained variance | 0.785
                       | 1e-06
    learning_rate
                      | 16290
    n_updates
    policy_gradient_loss | 0.00244
    value_loss | 514
 rollout/
                     1.05e+03
1.87e+03
    ep len mean
    ep rew mean
 time/
                       120
   fps
    iterations
                       | 1631
    time elapsed
                     | 6924
                     835072
   total_timesteps
 train/
                       0.0013991141
    approx_kl
    clip fraction
                      | 0.00527
    clip_range
                      | 0.2
    entropy loss
                       | -0.475
    explained_variance | 0.851
    learning_rate
                       le-06
                       | 117
    loss
                       | 16300
    n_updates
    policy_gradient_loss | 0.000341
    value_loss | 216
| rollout/
```

```
ep len mean
                      | 1.05e+03
   ep_rew_mean
                      | 1.87e+03
time/
                      | 120
  fps
   iterations
                      | 1632
   time_elapsed
                     | 6928
  total timesteps
                    835584
train/
                      0.0048732455
  approx kl
                     | 0.0373
   clip_fraction
   clip range
                     | 0.2
                     | -0.603
   entropy_loss
   explained variance | 0.923
   learning_rate
                    | 1e-06
                      33.8
   loss
                      16310
   n_updates
   policy gradient loss | -0.00719
   value_loss | 162
rollout/
                      | 1.05e+03
   ep_len_mean
  ep_rew_mean
                    | 1.87e+03
time/
                     | 120
                    | 1633
  iterations
                    | 6932
   time_elapsed
  total_timesteps
                     | 836096
train/
                     0.00023601821
  approx_kl
   clip fraction
   clip range
                     0.2
  entropy_loss
                     | -0.596
   explained_variance | 0.855
   learning_rate | 1e-06
                     79
   loss
   n updates
                    16320
   policy_gradient_loss | 0.00015
   value_loss
             | 215
rollout/
                   | 1.05e+03
| 1.87e+03
   ep len mean
  ep_rew_mean
time/
  fps
                      120
  iterations
                     | 1634
   time elapsed
                    836608
  total_timesteps
train/
                     | 0.0052507618
  approx_kl
                     0.0271
   clip_fraction
   clip_range
                    | 0.2
  entropy_loss | -0.872
explained_variance | 0.821
   learning_rate
                      | 1e-06
                      | 205
  loss
                      | 16330
   n updates
   policy_gradient_loss | -0.00325
                 | 459
   value loss
rollout/
  ep_len_mean
                    1.05e+03
                    | 1.87e+03
  ep_rew_mean
time/
                      | 120
  fps
  iterations
                     | 1635
                    | 6941
   time_elapsed
   total_timesteps
                     | 837120
train/
  approx kl
                     0.0007265549
                    | 0.00234
   clip_fraction
   clip range
                     0.2
                      | -0.599
   entropy_loss
   explained variance | 0.673
                      | 1e-06
   learning_rate
   loss
                      | 241
                      | 16340
   n updates
   policy_gradient_loss | -0.00321
   value_loss
```

```
rollout/
                        1.05e+03
   ep len mean
   ep_rew_mean
                       | 1.87e+03
time/
                       1 120
  fps
                        1636
   iterations
   time elapsed
                        6945
                       | 837632
   total_timesteps
                      | 0.00044720923
   approx_kl
   clip_fraction
                      0.00234
   clip_range
                      0.2
   entropy loss
                      | -0.463
   explained variance | 0.934
   learning_rate | 1e-06
   loss
                       I 51.8
                      | 16350
   n updates
   policy_gradient_loss | -0.000705
   value loss | 94.8
rollout/
  ep_len_mean
ep_rew_mean
                      | 1.06e+03
                      | 1.88e+03
time/
                      | 120
  fps
   iterations
                      | 1637
   time_elapsed
                      | 6949
  total_timesteps
                      | 838144
train/
                      0.00031194335
   approx_kl
   clip_fraction
                      | 0.2
   clip range
   entropy_loss | -0.62
explained_variance | 0.884
                      l 1e-06
   learning_rate
                       | 70.2
                     | 16360
   n updates
   policy_gradient_loss | -0.000328
   value loss
                       | 181
rollout/
                       1.06e+03
   ep len mean
   ep rew mean
                      | 1.88e+03
time/
                      | 120
   fps
                      1638
   iterations
   time_elapsed
                     | 6953
  total_timesteps
                      | 838656
train/
                      0.0004994897
  approx kl
                      | 0.00215
   clip_fraction
  clip_range
entropy_loss
                      j 0.2
                      | -0.396
   explained variance | 0.339
                      | 1e-06
   learning_rate
   loss
                       | 404
                       | 16370
   n_updates
   policy_gradient_loss | 0.000477
   value_loss
                     | 1.06e+03
   ep_len_mean
   ep_rew_mean
                      1.88e+03
time/
                       | 120
                        1639
   iterations
   time elapsed
                        6958
                     839168
   total_timesteps
                      | 0.0015066094
   approx_kl
   clip fraction
                      0.00801
   clip_range
                      0.2
                       | -0.595
   entropy loss
   explained_variance | 0.938
   learning_rate
                       | 1e-06
                       | 40.1
   n updates
                       | 16380
   policy_gradient_loss | -0.0015
   value loss | 102
```

```
rollout/
                       1.07e+03
   ep len mean
   ep rew mean
                      | 1.89e+03
time/
                      | 120
  fps
                       1640
   iterations
   time elapsed
                      | 6962
  total_timesteps
                     839680
train/
  approx kl
                      | 0.0014320157
                      | 0.0385
   clip_fraction
                     0.2
  clip range
   entropy_loss
                      | -0.671
   explained variance | 0.716
                      l 1e-06
  learning_rate
                      | 37.5
                      | 16390
   n_updates
   policy gradient loss | -0.00242
   value_loss | 189
rollout/
                       1.07e+03
   ep_len_mean
  ep_rew_mean
                     | 1.89e+03
time/
                      | 120
                     | 1641
  iterations
  time elapsed
                    | 6967
                    840192
  total_timesteps
                      0.0025708354
  approx kl
                     | 0.0129
   clip fraction
   clip_range
                     0.2
   entropy loss
                      | -0.512
   explained_variance | 0.544
   learning_rate
                     | 1e-06
                      | 494
  loss
   n_updates
                      | 16400
   policy_gradient_loss | -0.000172
                     | 841
   value_loss
rollout/
                     | 1.07e+03
   ep len mean
  ep_rew_mean
                     1.9e+03
time/
  fps
                      120
                     | 1642
  iterations
                    | 6971
   time elapsed
   total_timesteps
                      | 840704
train/
                      0.0005084034
  approx_kl
   clip fraction
                      0.2
   clip_range
   entropy_loss
                     -0.58
   explained_variance | 0.921
   learning_rate
                     | 1e-06
                      | 53.7
   loss
   n updates
                      | 16410
   policy_gradient_loss | -0.00137
   value loss
                      | 102
rollout/
```

| 1.07e+03 ep len mean | 1.9e+03 ep_rew_mean time/ | 120 fps iterations time_elapsed | 6975 total_timesteps | 841216 train/ approx kl 0.002997683 clip_fraction | 0.0107 clip_range 0.2 | -0.654 entropy_loss explained variance 0.635 learning_rate | 1e-06 loss 394 n_updates | 16420 policy_gradient_loss | -0.00185 | 751 value_loss

rollout/ | 1.07e+03 ep_len_mean i 1.9e+03 ep rew mean time/ fps | 120 | 1644 iterations | 6979 | 841728 time elapsed total_timesteps train/ 0.0029038624 approx_kl 0.0119 clip_fraction clip_range | 0.2 entropy_loss | -0.636 explained_variance | 0.87 learning_rate | 1e-06 loss | 92.8 n updates | 16430 policy_gradient_loss | -0.00374 value_loss | 207 ep_len_mean ep_rew_mean | 1.07e+03 | 1.07e+03 | 1.9e+03 time/ | 120 fps iterations | 1645 time_elapsed | 6984 | 842240 total timesteps train/ 0.0016058333 approx kl explained variance | 0.938 learning_rate | 1e-06 loss | 37.3 | 37.3 | 16440 n_updates policy_gradient_loss | -0.000677 value_loss | 81.5 ep_len_mean 1.08e+03 1.91e+03 ep_rew_mean time/ | 120 fps | 1646 iterations 6988 time_elapsed total_timesteps | 842752 0.00049171306 0 0.2 approx kl clip_fraction clip range entropy_loss | -0.562 explained_variance | 0.802 learning_rate | 1e-06

| 1.09e+03 ep_len_mean ep_rew_mean | 1.91e+03 time/ | 120 | 1647 iterations | 6992 | 843264 time elapsed total_timesteps train/ approx kl 0.0028384225 clip fraction 0.0371 | 0.2 clip_range entropy_loss | -0.476 explained_variance | 0.64 learning_rate | 1e-06 | 292 | 16460 n updates policy_gradient_loss | -0.00402

value_loss	624
rollout/	I I
ep_len_mean	1.09e+03
ep_rew_mean	1.91e+03
time/ fps	
l iterations	120 1648
time_elapsed	6996
total_timesteps	843776
train/	
approx_kl clip fraction	0.0019071697 0.00684
clip_range	0.2
entropy_loss	-0.612
explained_variance	0.826
learning_rate loss	1e-06 159
n updates	159 16470
policy_gradient_loss	-0.00172
value_loss	437
rollout/	
ep len mean	
ep_rew_mean	1.91e+03
time/	
fps	120
iterations time elapsed	1649 7000
total_timesteps	7000 844288
train/	i i
approx_kl	0.0007709047
clip_fraction	0.00156
clip_range entropy loss	0.2 -0.56
explained variance	0.619
learning_rate	le-06
loss	108
n_updates	16480 -0.000296
<pre>policy_gradient_loss value loss</pre>	-0.000296
rollout/	
<pre> ep_len_mean ep rew mean</pre>	1.09e+03 1.92e+03
time/	1.526105
fps	120
iterations	1650
time_elapsed	7005
<pre> total_timesteps train/</pre>	844800
approx kl	0.002163366
clip_fraction	0.00664
clip_range	0.2
entropy_loss	-0.592
<pre> explained_variance learning_rate</pre>	0.894 1e-06
loss	19.9
n_updates	16490
policy_gradient_loss	-0.000896
value_loss	61
rollout/	
ep_len_mean	1.09e+03
ep_rew_mean	1.92e+03
time/	
fps iterations	120 1651
time_elapsed	1051 7009
total_timesteps	845312
train/	İ

1e-06

324

16500

0.0008828682 0.00313 0.2 -0.509 0.446

| train/

anny
approx_kl
clip_fraction
clip_range
entropy_loss
explained_variance

learning_rate

loss

n_updates

policy_gradient_loss value_loss	-0.000894 684
rollout/	1
ep_len_mean	1.09e+03
ep_rew_mean	1.92e+03
time/	
fps	120
iterations	1652 7013
<pre> time_elapsed total timesteps</pre>	845824
train/	043024
approx kl	0.0027012774
clip_fraction	0.0105
clip_range	0.2
entropy_loss	-0.493
explained_variance	0.913
learning_rate	1e-06
loss n updates	18.7 16510
. = .	10510
value loss	57.6
	-
rollout/	
ep_len_mean	1.09e+03
ep_rew_mean	1.93e+03
time/	
fps iterations	120 1653
time elapsed	1033 7017
total timesteps	846336
train/	
approx_kl	0.0008779559
clip_fraction	0.000586
clip_range	0.2
entropy_loss	-0.509
explained_variance	0.833
learning_rate loss	1e-06 26.9
n updates	16520
-: - <u>-</u> :	0.00173
	113
rollout/	
ep_len_mean	1.09e+03
ep_rew_mean time/	1.93e+03
fps	
iterations	1654
time elapsed	7021
total_timesteps	846848
train/	
approx_kl	0.0008532987
clip_fraction	0.000977
clip_range	0.2 -0.545
<pre> entropy_loss explained variance</pre>	-0.545 0.63
learning rate	0.03 1e-06
loss	163
n updates	16530
policy_gradient_loss	-0.00117
value_loss	825
L ==11==±/	
rollout/	1 000,03
<pre> ep_len_mean ep rew mean</pre>	1.09e+03 1.93e+03
time/	-1.550.05
fps	

n updates	16540
policy_gradient_loss	-0.00137
value_loss	175
rollout/	I I
ep_len_mean	1.09e+03
ep rew mean	1.93e+03
time/	
fps	120
iterations	1656
time_elapsed	7030
total_timesteps	847872
train/	0.00075749785
approx_kl clip fraction	0.00073743763
clip range	0.2
entropy_loss	-0.426
	0.772
learning_rate	1e-06
loss	48.6
<pre>n_updates policy_gradient_loss</pre>	16550
	137
Vatac_toss	
rollout/	1
ep_len_mean	1.1e+03
ep_rew_mean	1.95e+03
time/ fps	
iterations	120
· ·	7034
total_timesteps	848384
train/	į į
approx_kl	0.0037138346
clip_fraction	0.0195
clip_range	0.2 -0.488
<pre>entropy_loss explained variance</pre>	0.816
learning_rate	1e-06
loss	63.4
n_updates	16560
' ' ' - ' -	-0.00241
value_loss	113
rollout/	1
	1.1e+03
ep_len_mean	1.10.05
ep_len_mean ep_rew_mean	1.95e+03
ep_rew_mean time/	1.95e+03
ep_rew_mean time/ fps	1.95e+03
ep_rew_mean time/ fps iterations	1.95e+03
ep_rew_mean time/ fps iterations time_elapsed	1.95e+03
ep_rew_mean time/ fps iterations	1.95e+03
<pre>ep_rew_mean time/ fps iterations time_elapsed total_timesteps</pre>	1.95e+03
<pre>ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction</pre>	1.95e+03
<pre>ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range</pre>	1.95e+03
<pre>ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss</pre>	1.95e+03
<pre>ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance</pre>	1.95e+03
<pre>ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate</pre>	1.95e+03
<pre>ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss</pre>	1.95e+03
ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates	1.95e+03
ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates	1.95e+03
<pre>ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss</pre>	1.95e+03
ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss	1.95e+03
ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss	1.95e+03
ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean	1.95e+03
ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss	1.95e+03
ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean	1.95e+03
ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/	1.95e+03
<pre>prew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed</pre>	1.95e+03
<pre> ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss</pre> rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps	1.95e+03
<pre> ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss</pre> rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/	1.95e+03
<pre>prew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl</pre>	1.95e+03
<pre>prew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction</pre>	1.95e+03
ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss	1.95e+03
<pre>prew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss</pre>	1.95e+03

loss n_updates policy_gradient_loss	231
	408
rollout/	
ep_len_mean	1.11e+03
ep_rew_mean	1.96e+03
time/ fps	
iterations	1660
time elapsed	7047
total timesteps	849920
train/	
approx_kl	0.00031118712
clip_fraction	0.000195
clip_range	0.2
entropy_loss	-0.464
' -	0.755 1e-06
learning_rate loss	1e-00 222
n updates	16590
	0.000529
value loss	566
rollout/	
ep_len_mean	1.11e+03
ep_rew_mean	1.96e+03
time/	
fps	120
<pre> iterations time elapsed</pre>	1661 7052
total timesteps	850432
train/	030432
approx kl	0.0012580601
clip fraction	0.00742
clip_range	0.2
entropy_loss	-0.412
<pre> explained_variance</pre>	0.887
learning_rate	1e-06
loss	73.1
n_updates	16600
<pre>policy_gradient_loss value loss</pre>	-0.00151 164
vatue_toss	104
rollout/	
ep_len_mean	1.12e+03
ep_rew_mean	1.97e+03
time/	
fps	120
iterations	1662
time_elapsed	7056
<pre> total_timesteps train/</pre>	850944
approx kl	
clip_fraction	0.0014282731
clip_rraction	0.00557
entropy_loss	-0.464
explained_variance	0.826
l learning_rate	le-06
loss	117
n_updates	16610
	0.00141
value_loss	276
rollout/	l I
ep len mean	
ep_rew_mean	1.96e+03
time/	
fps	120
iterations	1663
time_elapsed	7060
total_timesteps	851456
train/	
approx_kl	0.0009774613
clip_fraction	0.00859 0.2
<pre> clip_range entropy_loss</pre>	⊍.∠ -0.226
	0.352
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	, · · I

learning_rate loss n_updates policy_gradient_loss value_loss	1e-06 355 16620 -0.00106 858
rollout/ ep_len_mean ep rew mean	
time/	1.500.05
fps	120
iterations	1664
time_elapsed	7064
total_timesteps	851968
train/	
approx_kl	0.00076495646 0.00195
<pre> clip_fraction clip range</pre>	0.00193
entropy_loss	-0.417
	0.457
learning_rate	le-06
loss	387
	16630
policy_gradient_loss	
value_loss	761
rollout/	
ep len mean	1.11e+03
ep rew mean	1.97e+03
time/	i i
fps	120
iterations	1665
time_elapsed	7069
total_timesteps	852480
train/ approx kl	
clip_fraction	0.0023003027
	0.2
entropy_loss	-0.638
explained_variance	0.787
learning_rate	1e-06
loss	209
n_updates	16640
policy_gradient_loss	0.000658 420
value_loss	420
rollout/	
ep_len_mean	1.11e+03
ep_rew_mean	1.97e+03
time/	
fps iterations	120
time elapsed	1666 7073
total timesteps	852992
train/	
approx_kl	0.00064567407
clip_fraction	0.00547
clip_range	0.2
entropy_loss	-0.539
<pre> explained_variance learning_rate</pre>	0.817 1e-06
	197
n updates	16650
policy_gradient_loss	0.000493
value_loss	433
mallau+/	
rollout/ ep_len_mean	
ep_ten_mean	1.97e+03
time/	
fps	120
iterations	1667
time_elapsed	7077
total_timesteps	853504
train/	 0.0010182739
approx_kl clip fraction	0.0010182739
clip_rraction clip range	0.00234
entropy_loss	-0.427

```
explained variance
                     0.922
  learning_rate
                      | 1e-06
                      54.8
  loss
                      | 16660
  n_updates
  policy_gradient_loss | -0.000984
                    | 132
  value loss
                        1.11e+03
  ep_len_mean
  ep_rew_mean
                      | 1.97e+03
time/
  fps
                      | 120
  iterations
                      | 1668
  time elapsed
                      7081
                     854016
  total timesteps
train/
                      | 0.00074482744
  approx_kl
  clip fraction
                      0.0111
  clip_range
                      0.2
                      | -0.389
  entropy_loss
  explained_variance | 0.559
                      | 1e-06
  learning_rate
                      | 402
  n updates
                     | 16670
  policy_gradient_loss | 0.00161
  value loss | 832
rollout/
  ep len mean
                      | 1.11e+03
                      | 1.97e+03
  ep_rew_mean
                      | 120
  fps
                      | 1669
  iterations
                      | 7086
  time elapsed
  total_timesteps
                     | 854528
train/
  approx_kl
                      | 0.0030514686
  clip_fraction
                     | 0.0291
                     | 0.2
  clip_range
                      | -0.377
  entropy_loss
  explained_variance | 0.731
                      l 1e-06
  learning_rate
                      | 65.7
                      | 16680
  n updates
  policy_gradient_loss | -0.00565
  value loss | 224
                      | 1.11e+03
  ep_len_mean
  ep_rew_mean
                     | 1.97e+03
time/
                      | 120
  fps
                      1670
  iterations
                    | 7090
  time_elapsed
  total_timesteps
                      | 855040
train/
                      0.0010202655
  approx kl
  clip_fraction
                      | 0.00117
  clip_range
entropy_loss
                      0.2
                      | -0.407
  explained variance | 0.802
  learning_rate
                      | 1e-06
  loss
                      | 95.5
                      | 16690
  n_updates
  policy_gradient_loss | -0.00102
  value_loss
                      | 211
                      | 1.12e+03
  ep len mean
                      | 1.98e+03
  ep rew mean
time/
                      | 120
  fps
                        1671
  iterations
  time elapsed
                        7094
  total_timesteps
                      | 855552
train/
                      | 0.0048880535
  approx_kl
  clip fraction
                      0.0553
  clip_range
                      0.2
```

=:!::::::::::::::::::::::::::::::::::::	-0.371 0.627 1e-06 120 16700 -0.00555 341
rollout/ ep len mean	1.12e+03
ep rew mean	1.97e+03
time/	ĺ
fps	120
iterations time elapsed	1672 7098
total timesteps	856064
train/	
approx_kl clip_fraction	0.0009904389 0.0121
clip_rraction	0.2
entropy_loss	-0.28
explained_variance	0.621
learning_rate	1e-06
loss n updates	285 16710
· - ·	-0.00104
value_loss	814
rollout/	
ep_len_mean	1.12e+03
ep_rew_mean	1.97e+03
time/	120
iterations	1673
time_elapsed	7103
total_timesteps	856576
train/ approx kl	0.0007494859
clip_fraction	0.00664
clip_range	0.2
entropy_loss	-0.271
<pre> explained_variance learning rate </pre>	0.469 1e-06
loss	452
n_updates	16720
policy_gradient_loss	
value_loss	708
rollout/	1 1102
ep_len_mean ep rew mean	1.11e+03 1.97e+03
time/	
fps	120
iterations	1674
<pre> time_elapsed total timesteps </pre>	7107 857088
train/	
i approx_kl i	0.0016234596
clip_fraction	0.0119
<pre> clip_range entropy loss </pre>	0.2 -0.415
	0.832
learning_rate	1e-06
loss	58.5
n_updates	
	16730
1 1 1 1 1	-0.00108
value_loss	-0.00108
value_loss rollout/	-0.00108 128
value_loss	-0.00108
value_loss rollout/ ep_len_mean ep_rew_mean time/	-0.00108 128 1
value_loss rollout/ ep_len_mean ep_rew_mean time/ fps	-0.00108 128 128 128 129 120 1
value_loss	-0.00108 128 128 128 128 129 120 1675 128 129 1675 128 129 1675 128 129 1675 129 1675 128 129 1675 129 1
value_loss rollout/ ep_len_mean ep_rew_mean time/ fps	-0.00108 128 128 128 129 120 1
<pre> value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/</pre>	-0.00108 128 128 128 128 128 129 1675 7111 857600 128 129 1675 129 1
value_loss	-0.00108 128 128 128 128 129 149 1

```
clip_range
                      0.2
                      | -0.404
   entropy_loss
   explained variance | 0.667
   learning_rate
                      | 1e-06
                      | 137
   loss
                      | 16740
   n updates
   policy_gradient_loss | -0.00396
   value_loss | 480
rollout/
   ep_len_mean
                       1.11e+03
  ep_rew_mean
                      | 1.97e+03
time/
                      120
  fps
                      | 1676
   iterations
   time elapsed
                     7115
  total timesteps
                    858112
train/
  approx_kl
                      | 0.0015977611
   clip_fraction
                      | 0.0199
                     | 0.2
   clip_range
  entropy_loss | -0.557
explained_variance | 0.711
   learning_rate
                     | 1e-06
                     | 85.7
   loss
   n updates
                      | 16750
   policy_gradient_loss | -0.000638
   value loss | 222
rollout/
                      | 1.12e+03
   ep len mean
  ep_rew_mean
                      | 1.97e+03
time/
                      | 120
  fps
  iterations
                      | 1677
                    ; 7119
| 858624
  time_elapsed
  total_timesteps
train/
                      | 0.0010171497
  approx_kl
  clip_fraction
                     | 0.00254
   clip_range
                     0.2
                      | -0.441
   entropy_loss
   explained variance | 0.854
   learning_rate | 1e-06
                      | 42.4
   n updates
   policy_gradient_loss | 0.000722
   value_loss | 155
                    | 1.12e+03
| 1.98e+03
  ep_len_mean
  ep_rew_mean
                      | 120
                    | 1678
  iterations
                    7124
   time elapsed
  total_timesteps
                      | 859136
train/
                      0.0022335278
  approx kl
   clip fraction
                     | 0.0115
   clip_range
                     0.2
                     | -0.539
   entropy_loss
   explained_variance | 0.791
                      | 1e-06
   learning_rate
   loss
   n_updates
                      | 16770
   policy_gradient_loss | -0.000817
   value_loss
rollout/
                      | 1.12e+03
  ep len mean
  ep_rew_mean
                      1.98e+03
time/
                      | 120
  iterations
                      | 1679
   time elapsed
                      | 7128
  total_timesteps
                      | 859648
train/
                      0.0015372806
  approx_kl
```

```
clip_fraction
                      0.0105
   clip_range
                      0.2
   entropy_loss
                      | -0.332
   explained_variance | 0.17
   learning_rate
                      | 1e-06
                      | 144
                      | 16780
   n updates
   policy_gradient_loss | -0.00277
   value loss
                      | 880
rollout/
  ep len mean
                        1.12e+03
                      | 1.98e+03
  ep_rew_mean
time/
                      1 120
  fps
  iterations
                      1680
                      | 7133
   time elapsed
  total timesteps
                      860160
train/
                      | 0.0026799385
  approx kl
   clip_fraction
                      | 0.00937
   clip range
                      0.2
  entropy_loss
                      | -0.395
   explained variance | 0.738
   learning_rate
                     | 1e-06
                      | 22.4
                      | 16790
   n_updates
   policy_gradient_loss | -0.00208
   value_loss
              | 79.1
  ep len mean
                      | 1.12e+03
  ep_rew_mean
                      | 1.99e+03
time/
  fps
                      | 120
                        1681
  iterations
   time_elapsed
                        7137
  total_timesteps
                      | 860672
                      | 0.0002426391
  approx_kl
   clip_fraction
                      0.000586
                      0.2
   clip range
   entropy loss
                      | -0.416
   explained variance | 0.442
   learning_rate
                      | 1e-06
   loss
                      48.8
   n_updates
                     | 16800
   policy_gradient_loss | 0.000778
                      | 121
   value_loss
rollout/
                      | 1.12e+03
  ep_len_mean
  ep rew mean
                      | 2e+03
time/
  fps
                      | 120
                      | 1682
   iterations
   time elapsed
                      | 7142
  total_timesteps
                      | 861184
train/
                      0.0026559697
   approx_kl
   clip fraction
                      0.0131
   clip_range
                      0.2
                      | -0.559
   entropy_loss
   explained_variance
                     0.492
   learning_rate
                      | 1e-06
   loss
                        371
                        16810
   n updates
   policy_gradient_loss | -0.00247
rollout/
  ep len mean
                      | 1.12e+03
  ep_rew_mean
                      | 2e+03
time/
                      | 120
  fps
   iterations
                      | 1683
                      | 7146
   time_elapsed
   total_timesteps
                      | 861696
train/
```

approx_kl	0.0065890187
clip fraction	0.0428
clip range	0.2
entropy_loss	-0.707
	0.902
learning_rate	1e-06
loss	96.4
n_updates	16820
<pre>policy_gradient_loss</pre>	-0.00483
value loss	282
	'
rollout/	1
ep_len_mean	1.11e+03
ep_rew_mean	1.98e+03
time/	
fps	120
iterations	1684
time_elapsed	7150
total timesteps	862208
train/	
approx kl	ı 0.0042484645
clip_fraction	0.0234
clip_range	0.2
entropy_loss	-0.532
	0.842
learning rate	l 1e-06
l loss	99.2
•	16830
n_updates	'
	-0.0057
value_loss	179
rollout/	
ep len mean	1.11e+03
ep_rew_mean	1.98e+03
time/	
	120
fps	'
iterations	1685
time_elapsed	7154
<pre> total_timesteps</pre>	862720
train/	
approx kl	0 0007492994
clip_fraction	0.00234
clip_range	0.2
entropy loss	-0.453
• • • • •	'
explained_variance	0.356
learning_rate	1e-06
loss	1.06e+03
n_updates	16840
<pre>policy_gradient_loss</pre>	-0.00148
value loss	791
	'
rollout/	l I
rollout/	
ep_len_mean	
ep_len_mean ep_rew_mean	1.11e+03 1.98e+03
ep_len_mean ep_rew_mean time/	1.98e+03
ep_len_mean ep_rew_mean time/ fps	1.98e+03
ep_len_mean ep_rew_mean time/ fps iterations	1.98e+03
ep_len_mean ep_rew_mean time/ fps	1.98e+03
ep_len_mean ep_rew_mean time/ fps iterations	1.98e+03
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed	1.98e+03
<pre>ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/</pre>	1.98e+03
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl	1.98e+03
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction	1.98e+03
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range	1.98e+03
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss	1.98e+03
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance	1.98e+03
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss	1.98e+03
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance	1.98e+03
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n updates	1.98e+03
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n updates	1.98e+03
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss	1.98e+03
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss	1.98e+03
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss	1.98e+03
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss	1.98e+03
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss	1.98e+03
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean	1.98e+03
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean	1.98e+03
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/	1.98e+03
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean	1.98e+03
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/	1.98e+03
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps	1.98e+03
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed	1.98e+03
ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations	1.98e+03

```
train/
                       0.0041797534
   approx kl
   clip fraction
                       0.0266
                      0.2
   clip_range
                      | -0.757
   entropy_loss
   explained_variance | 0.897
   learning_rate
                      | 1e-06
                       | 53.3
   n updates
                      | 16860
   policy_gradient_loss | -0.00407
   value_loss | 160
rollout/
   ep len mean
                        1.11e+03
                      | 1.97e+03
  ep rew mean
time/
                      | 120
  fps
   iterations
                      | 1688
   time_elapsed
                      | 7167
  total_timesteps
                      864256
train/
                      | 0.0011433173
   approx kl
   clip_fraction
   clip range
                      0.2
                      | -0.865
   entropy_loss
   explained variance | 0.907
                      | 1e-06
   learning_rate
                      | 87.9
   loss
                      | 16870
   n_updates
   policy_gradient_loss | -0.00223
                      | 187
   value_loss
rollout/
                       | 1.11e+03
  ep_len_mean
   ep_rew_mean
                      | 1.97e+03
time/
  fps
                      | 120
                      | 1689
  iterations
                     | 7171
   time_elapsed
  total_timesteps
                      | 864768
train/
                      0.004972643
  approx kl
   clip fraction
                      0.0342
                      0.2
   clip range
   entropy_loss
                      | -0.742
   explained_variance | 0.941
   learning_rate
                      | 1e-06
   loss
                       | 33.3
   n_updates
                       | 16880
   policy_gradient_loss | -0.00363
   value loss
                      90.4
                      | 1.11e+03
   ep_len_mean
  ep_rew_mean
                      | 1.97e+03
time/
                       120
  fps
                      | 1690
   iterations
                        7175
   time elapsed
  total timesteps
                      865280
train/
                      | 0.004159474
   approx_kl
   clip_fraction
                      0.024
   clip_range
                      0.2
   entropy_loss
                      | -0.935
   explained_variance | 0.916
   learning_rate
                      | 1e-06
                      | 117
   loss
   n updates
                      | 16890
   policy_gradient_loss | -0.00284
   value loss
rollout/
  ep len mean
                      | 1.11e+03
  ep_rew_mean
                      | 1.97e+03
time/
                      | 120
  fps
   iterations
                        1691
                       7180
   time_elapsed
```

total_timesteps	865792
train/ approx kl	 0.00067104015
clip_fraction	0
clip_range	0.2
entropy_loss	-0.813
explained_variance	0.788
<pre> learning_rate loss</pre>	1e-06 120
n updates	16900
policy_gradient_loss	0.000548
value_loss	224
rollout/	
ep_len_mean	1.11e+03
ep_rew_mean	1.98e+03
time/ fps	
iterations	1692
time_elapsed	7184
total_timesteps	866304
train/	0.005375430
approx_kl clip_fraction	0.005375438 0.0135
clip_rraction	0.0133
entropy_loss	-1.1
explained_variance	0.712
learning_rate	1e-06
loss	295
n_updates	16910
<pre>policy_gradient_loss value_loss</pre>	553
rollout/	
ep len mean	1.11e+03
ep rew mean	1.98e+03
time/	į į
fps	120
iterations	1693
<pre> time_elapsed total timesteps</pre>	7188 866816
totat_timesteps train/	000010
approx kl	0.0043803477
clip_fraction	0.0162
clip_range	0.2
<pre> entropy_loss explained variance</pre>	-1.01 0.871
learning rate	l 1e-06
loss	214
n_updates	16920
	-0.00226
value_loss	413
rollout/	
ep_len_mean	1.11e+03
ep_rew_mean time/	1.98e+03
fps	120
iterations	1694
time_elapsed	7192
total_timesteps	867328
train/ approx kl	 0.004607039
approx_kt clip_fraction	0.004007039
clip range	0.2
entropy_loss	-0.871
<pre> explained_variance </pre>	0.899
learning_rate	l 1e-06
loss n updates	62.6 16930
. = .	-0.00451
	219
	· · ·
L rollout/	1
rollout/ ep len mean	 1.12e+03
ep_ten_mean	1.12e+03 1.99e+03
time/	
fps	120
iterations	1695

```
time elapsed
                      | 7196
                       867840
  total_timesteps
train/
                      0.010637163
  approx kl
                      0.0648
  clip fraction
  clip_range
                      0.2
                      i -0.895
  entropy loss
  explained_variance | 0.894
                      l 1e-06
  learning_rate
                      | 53.6
  loss
                      | 16940
  n updates
  policy_gradient_loss | -0.00633
  value loss
rollout/
  ep len mean
                      1.99e+03
  ep rew mean
time/
                      | 120
  fps
  iterations
                      | 1696
  time_elapsed
                       7201
  total_timesteps
                     | 868352
train/
  approx kl
                      0.0022469638
                     0.000977
  clip_fraction
  clip range
                     0.2
  entropy_loss
                      | -0.863
  explained variance | 0.783
                      | 1e-06
  learning_rate
                      | 206
                      | 16950
  n updates
  policy gradient loss | 0.000191
  value_loss | 717
                     | 1.12e+03
  ep_len_mean
  ep_rew_mean
                      | 1.99e+03
time/
                      | 120
                     | 1697
  iterations
                      | 7205
  time_elapsed
  total_timesteps
                      1 868864
                      0.004463185
  approx kl
  clip_fraction
                      | 0.0336
  clip range
                      0.2
  entropy_loss
                      | -0.703
  explained_variance | 0.936
  learning_rate
                      | 1e-06
                      | 64.3
  loss
  n updates
                      | 16960
  policy_gradient_loss | -0.00439
  value_loss | 214
rollout/
                      | 1.13e+03
  ep_len_mean
  ep rew mean
                      | 2e+03
time/
                      120
  fps
                      | 1698
  iterations
  time elapsed
  total_timesteps
                      869376
train/
                      0.0017119804
  approx_kl
  clip_fraction
                      0.00234
  clip_range
                      0.2
  entropy_loss
                      | -0.638
  explained_variance | 0.767
  learning_rate
                      | 1e-06
                      | 49.5
  loss
                      16970
  n updates
  policy gradient loss | -0.0015
  value loss
                      | 1.13e+03
  ep len mean
                      | 2e+03
  ep_rew_mean
time/
                      | 120
  fps
```

```
iterations
                       | 1699
   time_elapsed
                       | 7213
   total timesteps
                       869888
train/
                       0.0013466855
   approx kl
   clip_fraction
                      | 0.00273
   clip_range
entropy_loss
                       0.2
                      | -0.612
   explained variance | 0.779
   learning_rate
                       | 1e-06
                       | 117
   loss
                       | 16980
   n_updates
   policy_gradient_loss | -0.000181
                       325
   value loss
   ep_len_mean
ep_rew_mean
                        1.13e+03
                       2e+03
time/
                       | 120
   fps
   iterations
                        1700
   time elapsed
                        7218
   total_timesteps
                      | 870400
                      0.0031633973
   approx kl
   clip fraction
                      0.0227
                      0.2
   clip_range
   entropy loss
                      | -0.704
   explained_variance | 0.872
                     | 1e-06
   learning_rate
   loss
                       I 57.1
                       | 16990
   n_updates
   policy_gradient_loss | -0.00413
   value_loss | 112
rollout/
   ep_len_mean
ep_rew_mean
                      | 1.13e+03
                       | 2e+03
time/
  fps
                       | 120
                       | 1701
   iterations
                       | 7223
   time elapsed
   total timesteps
                       870912
train/
                      0.0045538247
   approx_kl
                     0.0596
   clip fraction
   clip_range
                      | 0.2
                      | -0.688
   entropy_loss
   explained_variance | 0.878
   learning_rate
                       | 1e-06
   loss
                       | 31.1
   n updates
                       | 17000
   policy_gradient_loss | -0.00408
   value loss
rollout/
                       | 1.14e+03
   ep len mean
   ep_rew_mean
                       | 2.02e+03
time/
                      | 120
   fps
   iterations
                      1702
                     | 7227
   time_elapsed
   total_timesteps
                       871424
train/
   approx kl
                      0.0032592306
   clip_fraction
                      0.00488
   clip range
                       0.2
   entropy_loss
                       | -0.873
   explained variance | 0.619
                       | 1e-06
   learning_rate
                       1 409
   n_updates
                       17010
   policy_gradient_loss | -0.000961
   value loss
   ep_len_mean
                       | 1.14e+03
   ep_rew_mean
                       | 2.02e+03
time/
```

fps	
1 175	120
iterations	1703
time elapsed	i 7231 i
total_timesteps	871936
train/	
approx kl	0.0012245469
clip_fraction	0.0084
	1
clip_range	0.2
entropy_loss	-0.842
<pre> explained variance</pre>	0.91
learning rate	1e-06
· ·	!
loss	105
n_updates	17020
<pre>policy_gradient_loss</pre>	-0.00133
	179
Value_toss	1/9
rollout/	1
	1.14e+03
ep_len_mean	
ep_rew_mean	2.01e+03
time/	I I
fps	i 120 i
• •	! !
iterations	1704
time_elapsed	7235
total timesteps	872448
train/	i i
approx_kl	0.0077902335
<pre> clip_fraction</pre>	0.035
clip range	0.2
entropy_loss	-0.981
<pre> explained_variance</pre>	0.933
<pre>learning_rate</pre>	1e-06
loss	64.8
	'
	17030
<pre>policy_gradient_loss</pre>	-0.00334
value loss	172
' –	
rollout/	
ep len mean	1.14e+03
ep rew mean	2.01e+03
	1 21010.03
time/	1
fps	120
l iterations	l 1705 l
time_elapsed	7240
	! !
<pre> total_timesteps</pre>	872960
train/	
approx kl	0.014364892
clip_fraction	l 0.06
clip_range	0.2
entropy_loss	-0.841
explained variance	0.912
	1e-06
	1 16-00
learning_rate	
	98.8
learning_rate	98.8 17040
learning_rate loss n_updates	17040
<pre>learning_rate loss n_updates policy_gradient_loss</pre>	17040 -0.00594
<pre>learning_rate loss n_updates policy_gradient_loss</pre>	17040
<pre>learning_rate loss n_updates policy_gradient_loss</pre>	17040 -0.00594
<pre>learning_rate loss n_updates policy_gradient_loss</pre>	17040 -0.00594
<pre>learning_rate loss n_updates policy_gradient_loss value_loss</pre>	17040 -0.00594
<pre>learning_rate loss n_updates policy_gradient_loss value_loss rollout/</pre>	17040 -0.00594 206
<pre>learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean</pre>	17040
<pre>learning_rate loss n_updates policy_gradient_loss value_loss rollout/</pre>	17040 -0.00594 206
<pre>learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean</pre>	17040
<pre>learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/</pre>	17040
<pre>learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps</pre>	17040
<pre>learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations</pre>	17040
<pre>learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed</pre>	17040
<pre>learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed</pre>	17040
<pre>learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps</pre>	17040
<pre>learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/</pre>	17040
<pre>learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl</pre>	17040
<pre>learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/</pre>	17040
<pre>learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction</pre>	17040
<pre>learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range</pre>	17040
<pre>learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss</pre>	17040
learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance	17040
<pre>learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss</pre>	17040
learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance	17040
learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss	17040
learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates	17040
learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss	17040
learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates	17040
learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss	17040
learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss	17040
learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss	17040
learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss	17040
learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss	17040
learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean	17040
learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss	17040

```
time/
                        120
   fps
   iterations
                        1707
                        7248
   time_elapsed
                       873984
   total_timesteps
train/
                        0.0015941529
   approx kl
   clip_fraction
                      | 0.000781
   clip range
                      0.2
   entropy_loss
                      | -0.702
   explained_variance | 0.937
   learning_rate
                      | 1e-06
                      | 68.1
   loss
                      | 17060
   n_updates
   policy_gradient_loss | -0.00159
   value_loss
                      | 152
rollout/
  ep_len_mean
                        1.15e+03
                     | 2.02e+03
  ep_rew_mean
time/
                      | 120
  fps
                      1708
  iterations
   time elapsed
                      | 7252
  total_timesteps
                      874496
train/
                      | 0.001436932
  approx_kl
   clip fraction
                      0.00254
  clip_range
                      0.2
   entropy_loss
                      | -0.734
   explained_variance | 0.759
   learning_rate
                      | 1e-06
   loss
                       1 82.3
                       | 17070
   n updates
   policy_gradient_loss | -0.000812
   value loss
  ep_len_mean
                      | 1.15e+03
  ep_rew_mean
                      | 2.02e+03
time/
  fps
                       1 120
                      | 1709
  iterations
                      | 7256
   time elapsed
   total_timesteps
                      875008
train/
                      0.0013400777
   approx_kl
                      0.00391
   clip_fraction
   clip_range
                      0.2
                      | -0.609
   entropy_loss
   explained_variance | 0.711
                      l 1e-06
   learning_rate
                       | 130
   loss
                      17080
   n updates
   policy_gradient_loss | -0.00208
   value loss
                       | 689
rollout/
                      | 1.15e+03
   ep len mean
   ep rew mean
                      | 2.02e+03
time/
                      | 120
  fps
   iterations
                      | 1710
   time_elapsed
                      | 7261
  total_timesteps
                       | 875520
train/
   approx kl
                      0.0020409715
                      | 0.0135
   clip_fraction
   clip range
                      0.2
   entropy_loss
                      | -0.587
   explained variance
                      0.925
                       l 1e-06
   learning_rate
   loss
                       | 25.3
                      | 17090
   n updates
   policy gradient loss | -0.00208
   value_loss
rollout/
                      | 1.15e+03
  ep_len_mean
```

```
ep rew mean
                        | 2.02e+03
 time/
                         120
    fps
                        | 1711
    iterations
                       | 7265
    time elapsed
    total_timesteps
                       876032
                       0.0021703988
    approx kl
    clip fraction
                      0.00762
    clip_range
entropy_loss
                      | 0.2
    entropy_loss | -0.655
explained_variance | 0.905
    learning_rate
                       l 1e-06
                        | 65.9
    loss
    n updates
                        17100
    policy gradient loss | -9e-05
    value loss
 rollout/
    ep len mean
                        | 1.15e+03
                       | 2.02e+03
    ep_rew_mean
 time/
                       120
   fps
    iterations
                      | 1712
    time_elapsed
                      | 7269
    total timesteps
                       | 876544
 train/
                       0.0008967243
    approx kl
                      0.00195
    clip_fraction
    clip_range
entropy_loss
                       0.2
                      -0.602
    explained variance | 0.817
    learning_rate | 1e-06
    loss
                       | 275
    n_updates
                       17110
    policy_gradient_loss | -0.00257
               | 457
    value_loss
 rollout/
                      | 1.15e+03
    ep len mean
    ep rew mean
                       | 2.02e+03
 time/
                       | 120
    fps
                      | 1713
    iterations
                      | 7273
| 877056
    time_elapsed
    total timesteps
 train/
                       | 0.0012148863
    approx kl
                       | 0.00176
    clip_fraction
                      0.2
    clip range
                       | -0.604
    entropy_loss
    explained variance | 0.819
                       | 1e-06
    learning_rate
                      | 17120
    n_updates
    policy_gradient_loss | -0.00214
    value_loss | 274
 rollout/
                      1.15e+03
2.02e+03
    ep len mean
    ep rew mean
 time/
   fps
                       | 120
    iterations
                       | 1714
    time elapsed
                      | 7277
    total_timesteps
                      | 877568
 train/
                       0.0034503029
    approx_kl
    clip fraction
                      0.0215
    clip_range
                      | 0.2
    entropy loss
                       | -0.654
    explained_variance | 0.463
    learning_rate
                       le-06
                        | 505
    loss
                        | 17130
    n_updates
    policy_gradient_loss | -0.00185
    value loss | 817
| rollout/
```

```
ep len mean
                      | 1.15e+03
   ep_rew_mean
                      | 2.01e+03
time/
                      | 120
  fps
                      1715
   iterations
   time_elapsed
                      | 7282
  total timesteps
                     i 878080
train/
                      | 0.004533455
  approx kl
   clip_fraction
                     0.0229
   clip_range
                     | 0.2
   entropy_loss
                      | -0.754
   explained variance | 0.731
   learning_rate
                     | 1e-06
                      188
   loss
                      17140
   n_updates
   policy gradient loss | -0.000783
   value_loss | 369
rollout/
                     | 1.15e+03
   ep_len_mean
  ep_rew_mean
                    | 2.01e+03
time/
                     | 120
                    | 1716
  iterations
  time_elapsed | 7286
total_timesteps | 878592
train/
                      0.0056679193
  approx_kl
                    0.0262
   clip fraction
   clip range
                     0.2
  entropy_loss
                     | -0.843
   explained_variance | 0.85
   learning_rate | 1e-06
                     | 367
   loss
   n updates
                    17150
   policy_gradient_loss | -0.00495
   value_loss | 486
rollout/
                   | 1.15e+03
   ep len mean
  ep_rew_mean
                     | 2e+03
time/
  fps
                      120
  iterations
                      | 1717
  time elapsed
                    7290
                    879104
  total_timesteps
train/
                     | 0.0030053689
  approx_kl
                    0.0178
   clip_fraction
  clip_range
                    | 0.2
  entropy_loss | -0.794
explained_variance | 0.875
                     le-06
   learning_rate
                      92.3
  loss
   n updates
                      | 17160
   policy_gradient_loss | -0.00419
                 | 278
   value loss
rollout/
  ep_len_mean
                     1.15e+03
  ep_rew_mean
                     | 2e+03
time/
                      | 120
  fps
  iterations
                      | 1718
                    | 7294
   time_elapsed
   total_timesteps
                     | 879616
train/
  approx kl
                     | 0.0022774194
                    | 0.00254
   clip_fraction
   clip range
                     0.2
                      | -0.687
   entropy_loss
   explained variance | 0.917
                      | 1e-06
   learning_rate
                      | 72.7
   loss
   n updates
                      17170
   policy_gradient_loss | 0.00142
   value_loss
```

```
rollout/
                        1.15e+03
   ep len mean
   ep_rew_mean
                       | 2.01e+03
time/
  fps
                       | 120
                       | 1719
   iterations
   time elapsed
                        7299
                       | 880128
   total_timesteps
                       | 0.002386779
   approx_kl
   clip fraction
                      | 0.00313
                      0.2
   clip_range
   entropy loss
                      | -0.606
   explained variance | 0.923
   learning_rate | 1e-06
                       1 30.8
   loss
   n updates
                       | 17180
   policy gradient loss | -5.96e-05
   value_loss | 101
rollout/
  ep_len_mean
ep_rew_mean
                      | 1.15e+03
                       | 2.01e+03
time/
                      | 120
  fps
                      | 1720
   iterations
   time_elapsed
                      | 7304
  total_timesteps
                       | 880640
train/
                     0.0015580459
0.00156
   approx_kl
   clip_fraction
   clip_range
                     0.2
   entropy_loss | -0.632
explained_variance | 0.915
                       l 1e-06
   learning_rate
                       | 153
                     | 17190
   n updates
   policy_gradient_loss | 0.00033
   value loss
                       | 242
rollout/
                       | 1.15e+03
   ep len mean
   ep_rew_mean
                      | 2.01e+03
time/
                      | 120
  fps
                      | 1721
   iterations
   time_elapsed
                     | 7308
  total timesteps
                      | 881152
train/
                      0.0056993677
  approx kl
                      | 0.0271
   clip_fraction
  clip_range
entropy_loss
                      0.2
                      | -0.46
   explained variance | 0.667
                      | 1e-06
   learning_rate
   loss
                       | 141
                       | 17200
   n_updates
   policy_gradient_loss | -0.00385
   value_loss
                     | 1.14e+03
   ep_len_mean
   ep_rew_mean
                      | 2e+03
time/
   iterations
                        1722
   time elapsed
                     881664
   total_timesteps
                       | 0.0013566385
   approx_kl
   clip fraction
                      0.00215
   clip_range
                      0.2
                       | -0.361
   entropy loss
   explained_variance | 0.836
   learning_rate
                       | 1e-06
                       I 51.4
   n_updates
                       | 17210
   policy_gradient_loss | -0.00102
   value loss | 215
```

```
rollout/
                       1.14e+03
  ep len mean
   ep_rew_mean
                      | 2e+03
time/
                      | 120
  fps
                       1723
   iterations
                     | 7316
   time elapsed
  total_timesteps
                    882176
train/
  approx kl
                     | 0.00032063178
  clip_fraction
                     | 0.2
  clip range
   entropy_loss
                      | -0.314
   explained variance | 0.709
                      l 1e-06
  learning_rate
                      | 17220
   n_updates
   policy gradient loss | -0.00111
   value_loss | 431
rollout/
                       1.14e+03
   ep_len_mean
  ep_rew_mean
time/
                     | 120
                     | 1724
  iterations
  time elapsed
                    7321
                    882688
  total_timesteps
                     0.00032467698
  approx kl
   clip fraction
                    | 0.2
   clip_range
   entropy loss
                     | -0.417
   explained_variance | 0.813
  learning_rate
                     | 1e-06
                     | 42.5
  loss
   n_updates
                     | 17230
   policy_gradient_loss | -0.000363
   value_loss | 168
rollout/
  ep len mean
                     | 1.14e+03
  ep_rew_mean
                    2e+03
time/
                     120
                     | 1725
  iterations
                   | 7325
  time elapsed
  total_timesteps
                     883200
train/
                     | 0.0009566352
  approx_kl
                     0.00742
   clip_fraction
  clip_range
entropy_loss
                     0.2
                    -0.326
   explained_variance | 0.846
   learning_rate | 1e-06
   loss
                      1 28.6
   n updates
                      | 17240
   policy_gradient_loss | -0.00252
   value loss
                      82.6
                    | 1.14e+03
  ep_len_mean
  ep_rew_mean
                     | 2e+03
time/
                      | 120
  fps
                       1726
   iterations
   time_elapsed
                     | 7329
  total_timesteps
                     | 883712
train/
                     0 00046933535
  approx kl
                     0.00313
   clip_fraction
```

clip range

entropy_loss

loss

n_updates

value_loss

learning_rate

explained_variance | 0.574

policy_gradient_loss | 0.000387

0.2

| 1e-06

| 17250

| 744

rollout/ ep_len_mean | 1.14e+03 ep_rew_mean | 1.99e+03 time/ 1 120 fps iterations | 1727 time elapsed 7333 total_timesteps | 884224 train/ 0.00029713998 approx_kl | 0.000391 clip_fraction clip_range entropy_loss 0.2 entropy_loss | -0.3 explained_variance | 0.935 learning_rate l 1e-06 | 76.5 loss n updates | 17260 policy_gradient_loss | 0.000655 value_loss | 178 ep_len_mean ep_rew_mean | 1.13e+03 1.98e+03 time/ | 120 fps iterations | 1728 7338 884736 time_elapsed total timesteps train/ 0.0023629896 approx kl | 0.0186 clip_fraction 0.2 clip_range entropy_loss | -0.346 explained variance | 0.619 learning_rate | 1e-06 | 357 loss n_updates i 17270 policy_gradient_loss | -0.00283 value_loss | 584 rollout/ 1.13e+03 ep len mean ep_rew_mean | 1.98e+03 time/ | 120 fps | 1729 iterations time_elapsed | 7342 total_timesteps | 885248 train/ 0.0008145127 0.0125 0.2 approx kl clip_fraction clip range entropy_loss | -0.371 explained variance | 0.513 learning_rate | 1e-06 loss | 17280 n_updates policy_gradient_loss | 0.0017 value_loss | 819

rollout/	1
ep len mean	1.12e+03
ep_rew_mean	1.97e+03
time/	
fps	120
iterations	1730
time_elapsed	7346
total_timesteps	885760
train/	
approx_kl	0.0011247265
clip_fraction	0.00469
clip_range	0.2
entropy_loss	-0.435
<pre> explained_variance</pre>	0.617
learning_rate	1e-06
loss	41
n_updates	17290
<pre>policy_gradient_loss</pre>	-6e-05

value_loss	137
rollout/	
ep_len_mean	1.12e+03
ep_rew_mean	1.97e+03
time/	
fps iterations	120 1731
time_elapsed	7350
total_timesteps	886272
train/	
approx_kl clip_fraction	0.0008091602 0
clip_range	0.2
entropy_loss	-0.365
explained_variance	0.686
<pre> learning_rate loss</pre>	1e-06 286
n updates	17300
1 , ,_3 _	-0.00084
value_loss	568
rollout/	
ep_len_mean	1.12e+03
ep_rew_mean	1.97e+03
time/	
fps iterations	120 1732
time_elapsed	7355
total_timesteps	886784
train/	
approx_kl clip_fraction	0.0011206511 0.00469
clip_rraction	1 0.2
entropy_loss	-0.436
explained_variance	0.88
learning_rate	1e-06 71.1
loss n updates	/1.1 17310
• = •	-0.00037
value_loss	166
rollout/	I I
ep_len_mean	1.12e+03
ep_rew_mean	1.97e+03
time/	
fps iterations	120 1733
time elapsed	7359
total_timesteps	887296
train/	
<pre> approx_kl clip_fraction</pre>	0.0031219232 0.0201
clip_rrange	0.0201
entropy_loss	-0.312
explained_variance	0.835
<pre> learning_rate loss</pre>	1e-06 44.4
n updates	17320
policy_gradient_loss	-0.0035
value_loss	237
rollout/	
ep_len_mean	1.12e+03
ep_rew_mean	1.97e+03
time/ fps	
iterations	1734
time_elapsed	7363
total_timesteps	887808
train/	 0.000387365
approx_kl clip fraction	0.00038/365
clip_range	0.2
entropy_loss	-0.276
explained_variance	0.783
<pre> learning_rate loss</pre>	1e-06 174
n_updates	174
- ·	

```
policy_gradient_loss | -0.000301
   value_loss | 561
                       | 1.12e+03
   ep len mean
   ep_rew_mean
                     1.97e+03
time/
                        120
                       | 1735
   iterations
   time_elapsed | 7367
total_timesteps | 888320
train/
                        0.0059673213
   approx_kl
                       0.0775
   clip fraction
   clip_range | 0.2
entropy_loss | -0.557
   explained_variance | 0.592
   learning_rate | 1e-06
   loss
                        | 355
   n updates
                        | 17340
   policy_gradient_loss | 0.00273
   value_loss | 979
rollout/
                      | 1.12e+03
| 1.97e+03
   ep len mean
  ep_rew_mean
time/
                         | 120
  fps
                        | 1736
   iterations
   time_elapsed | 7371
total_timesteps | 888832
train/
                        0.0009999085
   approx kl
                       0.0178
   clip_fraction
  clip_rante | 0.0178
clip_range | 0.2
entropy_loss | -0.296
explained_variance | 0.685
learning_rate | 1e-06
loss | 245
                       | 17350
   n updates
   policy gradient loss | 0.00131
   value_loss | 649
   ep_len_mean
ep_rew_mean
                        | 1.12e+03
                       1.97e+03
time/
   fps
                         | 120
                        | 1737
   iterations
                       | 7376
| 889344
   time_elapsed
   total_timesteps
train/
                       0.00033780758
   approx kl
                      | 0.000586
| 0.2
| -0.251
  clip_fraction
clip_range
entropy_loss
   explained_variance | 0.895
   learning_rate | 1e-06
   loss
                         | 32.3
                        17360
   n_updates
   policy gradient loss | -0.00131
                         | 103
   value loss
rollout/
                       | 1.12e+03
   ep_len_mean
   ep_rew_mean
                        | 1.97e+03
time/
                         | 120
                       | 1738
   iterations
                       | 7380
   time_elapsed
```

total timesteps

entropy_loss

learning_rate

explained_variance | 0.847

approx_kl
clip_fraction
clip_range

train/

loss

| 889856

0.2

| -0.208

| 1e-06 | 62.1

6.577675e-05 0.000586

<pre> n_updates policy_gradient_loss</pre>	17370 -0.000942
	192
rollout/	
ep_len_mean	1.12e+03
ep_rew_mean time/	1.97e+03
fps	120
iterations	1739
<pre> time_elapsed total timesteps</pre>	7385 890368
train/	i i
approx_kl clip fraction	0.004213814 0.0152
clip_rraction	0.0132
	-0.328
!	0.89 1e-06
loss	58.8
	17380
<pre>policy_gradient_loss value loss</pre>	-6.25e-05 249
• =	
rollout/	
ep len mean	1.12e+03
ep_rew_mean	1.97e+03
time/ fps	
iterations	1740
time_elapsed	7389
<pre> total_timesteps train/</pre>	890880
approx_kl	0.00018268812
clip_fraction	0 0.2
clip_range entropy_loss	-0.203
<pre> explained_variance</pre>	0.873
learning_rate loss	1e-06 100
n_updates	17390
policy_gradient_loss	-0.000215
value_loss	213
l ==11==±/	
rollout/ ep_len_mean	
ep_rew_mean	1.97e+03
time/ fps	
iterations	1741
time_elapsed	7393
<pre> total_timesteps train/</pre>	891392
approx_kl	0.0013236289
<pre> clip_fraction clip range</pre>	0.015 0.2
ctip_range entropy_loss	-0.245
<pre> explained_variance</pre>	0.49
learning_rate loss	1e-06 317
n_updates	17400
policy_gradient_loss	
value_loss	972
rollout/ ep len mean	 1.11e+03
ep_rew_mean	1.96e+03
time/	
fps iterations	120 1742
time_elapsed	7397
<pre> total_timesteps train/</pre>	891904
approx_kl	
clip_fraction	0.00293
<pre> clip_range entropy loss</pre>	0.2 -0.287
entropy_toss explained_variance	0.769
learning_rate	l 1e-06

```
loss
                      | 79.5
                      | 17410
   n_updates
   policy_gradient_loss | -0.00112
   value loss | 208
rollout/
   ep_len_mean
                       1.11e+03
  ep_rew_mean
                      | 1.96e+03
time/
  fps
                      | 120
                      | 1743
  iterations
                      | 7402
  time elapsed
  total_timesteps
                      | 892416
train/
                      0.00015238859
  approx kl
  clip fraction
                      0.000195
                     | 0.2
   clip_range
   entropy_loss
                      -0.247
   explained_variance | 0.536
                      | 1e-06
   learning_rate
                      | 107
                      | 17420
   n updates
   policy_gradient_loss | -0.000676
   value loss
                      | 625
rollout/
                      | 1.11e+03
  ep len mean
                     | 1.96e+03
  ep_rew_mean
time/
                      | 120
  fps
                      | 1744
  iterations
                     | 7406
  time elapsed
   total timesteps
                      | 892928
train/
  approx kl
                      0.0003120714
   clip_fraction
   clip_range
                      0.2
   entropy_loss
                     | -0.27
   explained_variance | 0.886
                     | 1e-06
   learning_rate
                      | 58.4
                      | 17430
   n_updates
   policy gradient loss | -4.97e-05
   value_loss | 145
                    | 1.1e+03
  ep len mean
  ep_rew_mean
                      | 1.94e+03
time/
  fps
                      | 120
                      | 1745
   iterations
   time_elapsed
                      | 7410
  total_timesteps
                      | 893440
train/
                      | 0.002680244
  approx kl
   clip_fraction
                      0.0211
                      0.2
   clip_range
                     | -0.537
   entropy_loss
   explained variance | 0.988
                      | 1e-06
   learning_rate
   n updates
                      | 17440
   policy_gradient_loss | -0.00401
   value_loss
rollout/
  ep_len_mean
                      | 1.1e+03
                      | 1.94e+03
  ep_rew_mean
time/
                      120
  fps
                      | 1746
   iterations
   time_elapsed
                      7414
                      | 893952
  total_timesteps
                      0.0013686211
   approx_kl
   clip_fraction
                      0.0162
                      0.2
   clip_range
   entropy loss
                      | -0.314
   explained_variance
                     | 0.649
```

learning_rate	1e-06
loss	298
• = •	17450
<pre>policy_gradient_loss </pre>	
value_loss	892
rollout/	
! - '	
ep_ten_mean	1.16+03 1.95e+03
time/	1.95e+05
fps	
iterations	120 1747
time elapsed	7419
total timesteps	894464
train/	
approx kl	0.003956586
· · · · · · · · · · · · · · · · · · ·	0.0277
clip_range	0.2
entropy_loss	-0.578
	0.681
learning_rate	1e-06
loss	319
	17460
policy_gradient_loss	-0.00243
value_loss	889
111	
rollout/	
ep_len_mean	1.1e+03
ep_rew_mean	1.95e+03
time/	
fps iterations	120 1748
time elapsed	7423
	894976
<pre> total_timesteps train/</pre>	094970
approx kl	
· · · · · · · · · · · · · · · · · · ·	0.0043
	0.2
entropy loss	-0.4
_ : : : - : : : : : : : : : : : : : : :	0.925
l learning rate	l 1e-06
loss	32.2
n updates	17470
policy_gradient_loss	-0.00286
value_loss	143
rollout/	
: '= =	1.1e+03
ep_rew_mean	1.96e+03
time/	
fps iterations	120 1749
time elapsed	7427
total timesteps	895488
train/	033400
approx kl	
clip_fraction	0.0007331737
clip_range	0.2
entropy_loss	-0.336
explained variance	0.868
	le-06
loss	31.5
n_updates	17480
policy_gradient_loss	-0.000475
value_loss	81.5
rollout/	
ep_len_mean	1.1e+03
ep_rew_mean	1.96e+03
time/	
fps iterations	120
T C I Q L T O I I 2	'
time elanced	1750
time_elapsed total timestens	1750 7431
total_timesteps	1750
total_timesteps train/	1750 7431 896000
total_timesteps train/ approx_kl	1750
total_timesteps train/ approx_kl clip_fraction	1750
total_timesteps train/ approx_kl clip_fraction clip_range	1750
total_timesteps train/ approx_kl clip_fraction	1750

```
explained variance
                     0.696
   learning_rate
                      | 1e-06
                      231
   loss
                      | 17490
   n_updates
   policy_gradient_loss | 0.00104
   value loss
   ep_len_mean
                        1.1e+03
  ep_rew_mean
                      | 1.96e+03
time/
  fps
                      | 120
   iterations
                      | 1751
   time elapsed
                        7435
  total timesteps
                     896512
                      0.00033946265
  approx_kl
  clip fraction
                      0.00156
   clip_range
                      0.2
                      | -0.308
   entropy_loss
   explained_variance | 0.742
                      | 1e-06
   learning_rate
                      | 81.6
   n updates
                      | 17500
   policy_gradient_loss | -0.00033
   value loss | 229
rollout/
   ep len mean
                        1.1e+03
                      | 1.96e+03
  ep_rew_mean
                      | 120
  fps
   iterations
                      | 1752
                      | 7440
   time elapsed
  total_timesteps
                      897024
train/
   approx_kl
                      0.002244879
   clip_fraction
                      | 0.0137
                      0.2
   clip_range
                      | -0.361
   entropy_loss
   explained variance | 0.904
                      l 1e-06
   learning_rate
                      | 30.3
                      | 17510
   n updates
   policy_gradient_loss | -0.00151
   value loss | 79.6
                      | 1.11e+03
  ep_len_mean
   ep_rew_mean
                     | 1.96e+03
time/
                      | 120
  fps
  iterations
                      | 1753
                    | 7444
   time_elapsed
  total_timesteps
                      | 897536
train/
                      0.00040562137
  approx kl
   clip_fraction
                      0.00449
   clip_range
                      0.2
  entropy_loss
                      | -0.376
   explained variance | 0.781
   learning_rate
                      | 1e-06
   loss
                      | 156
                      | 17520
   n_updates
   policy_gradient_loss | -0.00168
   value_loss
                      | 247
                      | 1.11e+03
   ep len mean
                      | 1.96e+03
  ep rew mean
time/
                      | 120
  fps
                      | 1754
  iterations
   time elapsed
                        7448
  total_timesteps
                      898048
                      | 0.0012742447
   approx_kl
   clip fraction
                      0.016
                      0.2
   clip_range
```

	-0.456
rollout/	
<pre> ep_len_mean ep rew mean</pre>	1.11e+03 1.96e+03
ep_rew_mean time/	1.90e+05
fps	120
iterations	1755
time_elapsed	7452
<pre> total_timesteps train/</pre>	898560
approx kl	 0.0010968213
clip_fraction	0.00176
clip_range	0.2
entropy_loss	-0.548
explained_variance	0.805
<pre> learning_rate loss</pre>	1e-06 147
n updates	17540
• = •	-0.00064
value_loss	368
rollout/	
ep len mean	
ep rew mean	1.94e+03
time/	j j
fps	120
iterations	1756
time_elapsed	7456
<pre> total_timesteps train/</pre>	899072
approx kl	 0.0017565729
clip_fraction	0.00547
clip_range	0.2
entropy_loss	-0.401
explained_variance	0.927
<pre> learning_rate loss</pre>	1e-06 53.7
n updates	17550
policy_gradient_loss	-0.00292
value_loss	288
rollout/	
ep len mean	
ep rew mean	1.95e+03
time/	
fps	120
iterations	1757
<pre> time_elapsed total timesteps</pre>	7461 899584
train/	055504
approx kl	0.004080146
clip_fraction	0.0453
clip_range	0.2
entropy_loss	-0.427
<pre> explained_variance learning_rate</pre>	0.542 1e-06
loss	16-00 219
n_updates	17560
1 1 1 1 1	-0.00461
value_loss	680
rollout/	
ep len mean	1.11e+03
ep_rew_mean	1.95e+03
time/	į į
fps	120
<pre> iterations time elapsed</pre>	1758 7466
time_etapsed total timesteps	7466 900096
train/	
approx_kl	0.0010361122
clip_fraction	0.0043

clip range	0.2	
entropy loss	-0.588	
_ :	0.887	
learning_rate	1e-06	
loss	60.3	
· — ·	17570	
<pre>policy_gradient_loss value loss</pre>	-0.000405	
rollout/	1 110,02	
ep_len_mean	1.11e+03 1.95e+03	
ep_rew_mean time/	1.956+05	
fps	120	
iterations	1759	
time_elapsed	7470	
total_timesteps	900608	
train/ approx kl	 0.001041766	
	0.001041700	
_ : _ : _ : _ : _ : _ : _ : _ : _ : _ :	0.2	
· · · · · · · · · · · · · · · · · · ·	-0.546	
• • =	0.744	
3_	1e-06	
	99.3 17580	
n_updates policy_gradient_loss		
value loss	223	
mallant/		
rollout/ ep_len_mean	 1.12e+03	
ep_rew_mean	1.96e+03	
time/		
fps	120	
iterations	1760	
	7474	
<pre> total_timesteps train/</pre>	901120	
approx kl	 0.003770376	
clip fraction	0.023	
clip_range	0.2	
entropy_loss	-0.47	
	0.875	
learning_rate loss	1e-06 67.4	
•	17590	
policy_gradient_loss		
value_loss	183	
	·	
rollout/	 	-
ep_len_mean	1.12e+03	j
ep_rew_mean	1.96e+03	
time/	120	
fps	120	
<pre> iterations time elapsed</pre>	1761 7478	
total timesteps	901632	
train/	İ	İ
approx_kl	0.00046685932	
clip_fraction	0	
1 1 2	0.2	
<pre> entropy_loss explained variance</pre>	-0.467 0.658	
	l 1e-06	
loss	562	
n_updates	17600	
policy_gradient_loss		
value_loss	779 	<u> </u>
rollout/		
ep_len_mean	1.12e+03	
ep_rew_mean	1.96e+03	
time/ fps		
ips iterations	120 1762	
time elapsed	7483	
total_timesteps	902144	
train/		
approx_kl	0.0020581693	

```
clip_fraction
                      0.00566
   clip_range
                      0.2
                      | -0.437
   entropy_loss
   explained_variance | 0.874
   learning_rate
                      | 1e-06
                      | 108
                     | 17610
   n updates
   policy_gradient_loss | -0.0028
   value loss | 201
rollout/
  ep len mean
                      | 1.12e+03
                    | 1.96e+03
  ep_rew_mean
time/
                      | 120
  fps
  iterations
                      1763
                    | 7487
  time elapsed
   total timesteps
                      902656
train/
                      | 0.0018947432
  approx kl
   clip_fraction
                     0.00547
  clip_range
entropy_loss
                      0.2
                     | -0.34
   explained variance | 0.924
                    | 1e-06
   learning_rate
                     | 29.5
                      | 17620
  n_updates
  policy_gradient_loss | -0.00175
             | 81
   value_loss
  ep_len_mean
                    | 1.12e+03
  ep_rew_mean
                     | 1.96e+03
time/
  fps
                      | 120
                      | 1764
  iterations
   time_elapsed
                     | 7491
                    903168
  total_timesteps
                      | 0.0009914784
  approx_kl
   clip fraction
                     0.00605
                     0.2
   clip range
   entropy loss
                     | -0.398
   explained variance | 0.952
  learning_rate
                     | 1e-06
  loss
                      49.3
   n_updates
                      | 17630
   policy_gradient_loss | -0.000783
             | 116
   value_loss
rollout/
  ep_len_mean
                     | 1.12e+03
  ep rew mean
                      | 1.96e+03
time/
  fps
                      | 120
   iterations
                      | 1765
   time elapsed
                      | 7495
  total_timesteps
                      903680
train/
                      0.0019288649
   approx_kl
   clip fraction
                    0.0314
   clip_range
                     0.2
                      | -0.349
   entropy_loss
   explained_variance | 0.925
   learning_rate
                      | 1e-06
   loss
                      | 40.7
                      | 17640
   n updates
   policy_gradient_loss | -0.00311
rollout/
  ep len mean
                      1.12e+03
                      | 1.96e+03
  ep_rew_mean
time/
                      | 120
                      | 1766
   iterations
                      | 7500
  time_elapsed
   total timesteps
                      | 904192
train/
```

```
approx_kl
                      | 0.0024343277 |
   clip_fraction
                      0.00586
                     | 0.2
  clip_range
entropy_loss
                      | -0.391
   explained variance | 0.77
   learning_rate
                    | 1e-06
   loss
                      | 91.2
             | 17650
   n updates
   policy_gradient_loss | -0.00109
   value_loss | 224
rollout/
  ep_len_mean
ep_rew_mean
                     | 1.12e+03
                      1.96e+03
time/
                      120
                     | 1767
  iterations
  time_elapsed
                     | 7504
  total_timesteps
                      904704
train/
                     | 0.00015648955
  approx_kl
   clip_fraction
  clip_range
entropy_loss
                      0.2
                     | -0.322
   explained_variance | 0.496
   learning_rate | 1e-06
                      | 220
   loss
   n updates
                      | 17660
   policy_gradient_loss | -0.000851
rollout/
  ep len mean
                      | 1.12e+03
                      | 1.96e+03
  ep_rew_mean
time/
                      | 120
  fps
                    | 1768
| 7508
| 905216
   iterations
  time_elapsed
  total_timesteps
train/
                     0.0019025715
  approx kl
                     0.0111
  clip_fraction
  clip_range
                    | 0.2
  entropy_loss | -0.28
explained_variance | 0.92
   learning_rate
                      l 1e-06
                     | 43.6
                     | 17670
   n updates
   policy_gradient_loss | -0.00144
   value_loss | 116
rollout/
  ep len mean
                     | 1.12e+03
                    1 1 96e+03
  ep_rew_mean
time/
                      | 120
  fps
                      | 1769
  iterations
                    | 7512
| 905728
  time_elapsed
  total timesteps
train/
  approx kl
                      0.00063263427
   clip_fraction
                     | 0.00332
                     | 0.2
   clip_range
                      | -0.294
   entropy_loss
   explained variance | 0.673
   learning_rate
                     | 1e-06
                      17680
   n_updates
   policy_gradient_loss | -0.00171
   value_loss | 541
rollout/
                    1.12e+03
  ep_len_mean
  ep_rew_mean
                     | 1.97e+03
time/
                      | 120
                      | 1770
  iterations
   time elapsed
                      | 7516
   total_timesteps
                      906240
```

train/ approx kl	 0.0011016674
clip_fraction	0.00605
clip_range	0.2
' ''	-0.336
<pre> explained_variance learning rate</pre>	0.811 1e-06
loss	102
n updates	17690
policy_gradient_loss	-0.0021
value_loss	204
rollout/	Ι Ι
ep_len_mean	1.12e+03
ep_rew_mean	1.97e+03
time/ fps	
iterations	1771
time_elapsed	7521
total_timesteps	906752
train/	0 004127005
approx_kl clip_fraction	0.004127905 0.0318
clip_range	0.2
entropy_loss	-0.489
• • -	0.965
learning_rate	1e-06
loss n updates	22.8 17700
	-0.00343
value_loss	87.9
rollout/	
ep len mean	
ep_rew_mean	1.97e+03
time/	į į
fps	120
iterations time_elapsed	1772 7525
total timesteps	907264
train/	
approx_kl	0.0016002335
clip_fraction	0.00996
clip_range entropy_loss	0.2 -0.369
	0.239
learning_rate	le-06
loss	240
- ! - <u> '</u>	17710 0.000903
	812
rollout/	
ep len mean	 1.12e+03
ep_rew_mean	1.97e+03
time/	
fps iterations	120 1773
time elapsed	1773 7529
total_timesteps	907776
train/	į į
approx_kl	0.003612267
<pre> clip_fraction clip_range</pre>	0.015 0.2
entropy_loss	-0.452
explained_variance	0.87
! _ !	le-06
l loss	67.7
<pre> n_updates policy_gradient_loss </pre>	17720 -0 00094
	155
- '	
rollout/	,
rollout/ ep len mean	
ep_rew_mean	1.12e+03 1.97e+03
time/	
fps	120
iterations time elapsed	1774 7533
1 cime_ctapaca	, , , , , , , , , , , , , , , , , , , ,

```
total_timesteps
                      908288
train/
  approx kl
                      0.0013200815
   clip_fraction
                      0.00352
                      0.2
   clip range
                     | -0.407
   entropy_loss
   explained variance | 0.482
                      | 1e-06
   learning_rate
   loss
                     | 17730
   n_updates
   policy_gradient_loss | -0.000296
   value loss
              | 797
rollout/
  ep_len_mean
ep_rew_mean
                      | 1.12e+03
                    i 1.97e+03
time/
  fps
  iterations
                      | 1775
   time elapsed
                     | 7537
                     908800
  total_timesteps
train/
                      | 0.0031557148
  approx_kl
   clip_fraction
                    0 0084
  clip_range
entropy_loss
                    | 0.2
                     | -0.449
   explained_variance | 0.877
   learning_rate
                     le-06
                      | 36.7
  loss
   n_updates
                      | 17740
   policy_gradient_loss | -0.00139
   value_loss
                      90.7
rollout/
  ep len mean
                     | 1.12e+03
  ep_rew_mean
                     | 1.97e+03
time/
                      | 120
                    | 1776
   iterations
  time_elapsed
                    | 7542
  total timesteps
                      | 909312
train/
                     0.00023267395
   approx kl
                     0.00293
   clip fraction
  clip_range
entropy_loss
                     0.2
                    -0.307
   explained_variance | 0.795
   learning_rate | 1e-06
   loss
                      | 57.6
   n updates
                      | 17750
   policy_gradient_loss | -0.00198
   value loss
                      | 196
rollout/
                    | 1.13e+03
  ep len mean
   ep_rew_mean
                      | 1.98e+03
time/
                      | 120
  fps
   iterations
                      1777
                     7546
  time elapsed
                    909824
  total timesteps
train/
  approx kl
                     | 0.0014461181
   clip_fraction
                      0.0043
   clip range
                     0.2
                     | -0.482
   entropy_loss
   explained_variance | 0.772
                      | 1e-06
   learning_rate
                     | 17760
   n_updates
   policy_gradient_loss | 0.00851
   value loss
                     | 472
rollout/
  ep_len_mean
                      | 1.13e+03
  ep_rew_mean
                      | 1.98e+03
time/
  fps
                      | 120
  iterations
                      | 1778
```

```
time elapsed
                      | 7551
                      | 910336
  total_timesteps
train/
                      0.00079091615
  approx kl
                      0.00176
  clip fraction
  clip_range
                      0.2
                     i -0.378
  entropy loss
  explained_variance | 0.713
                      le-06
  learning_rate
                      | 223
  loss
                      | 17770
  n updates
  policy_gradient_loss | 0.000723
  value loss
rollout/
  ep len mean
                     1.98e+03
  ep rew mean
time/
  fps
                      | 120
  iterations
                      | 1779
  time_elapsed
                    | 7555
  total_timesteps
                    | 910848
train/
  approx kl
                     0.0008805492
                    0.000586
  clip_fraction
                     | 0.2
  clip range
                      | -0.434
  entropy_loss
  explained variance | 0.836
                    | 1e-06
  learning_rate
                      | 86.5
                      | 17780
  n updates
  policy gradient loss | -0.000774
  value_loss | 251
                    | 1.13e+03
  ep_len_mean
  ep_rew_mean
                     | 1.98e+03
time/
                     | 120
                    | 1780
  iterations
                    7560
  time_elapsed
  total_timesteps
                     911360
                     0.00081306277
  approx kl
                    0 00488
  clip_fraction
                     0.2
  clip range
                     | -0.475
  entropy_loss
  explained_variance | 0.811
  learning_rate
                     | 1e-06
                      | 61.6
  loss
  n updates
                      | 17790
  policy_gradient_loss | -0.00213
  value_loss | 138
rollout/
                    | 1.14e+03
| 1.99e+03
  ep_len_mean
  ep_rew_mean
time/
                      120
  fps
                     | 1781
  iterations
  time elapsed
  total_timesteps
                    | 911872
train/
                      0.003169531
  approx_kl
  clip_fraction
                     0.0244
  clip_range
                      0.2
  entropy_loss
                     | -0.392
  explained_variance | 0.731
  learning_rate
                      | 1e-06
  loss
                      | 72
                      17800
  n updates
  policy gradient loss | -0.000903
  value loss
                      | 1.14e+03
  ep len mean
                      | 1.99e+03
  ep_rew_mean
time/
                      | 120
 fps
```

```
iterations
                       | 1782
   time_elapsed
                        7568
   total timesteps
                       912384
train/
                       0.0013072799
  approx kl
   clip_fraction
                       0.0268
  clip_range
entropy_loss
                       0.2
                       | -0.331
   explained variance | 0.756
   learning_rate
                       | 1e-06
                        172
   loss
   n_updates
                       | 17810
   policy_gradient_loss | -0.00121
                       | 607
   value_loss
   ep len mean
                        1.14e+03
   ep rew mean
                       1.99e+03
time/
                       | 120
  fps
   iterations
                        1783
   time elapsed
                        7572
   total_timesteps
                       | 912896
                       | 0.0030954187
   approx kl
   clip fraction
                      0.00996
                       0.2
   clip_range
   entropy loss
                       -0.547
   explained_variance | 0.896
   learning_rate
                       | 1e-06
   loss
                       63.1
                       | 17820
   n_updates
   policy_gradient_loss | -0.00118
   value loss
                     | 123
rollout/
   ep_len_mean
                       | 1.14e+03
  ep_rew_mean
                       | 1.99e+03
time/
  fps
                       | 120
                       | 1784
   iterations
                       7576
   time elapsed
   total_timesteps
                       913408
train/
                       0.0020906944
   approx_kl
   clip fraction
                      0.00469
   clip_range
                      0.2
                      | -0.68
   entropy_loss
   explained_variance | 0.933
   learning_rate
                       | 1e-06
   loss
                       | 132
                        17830
   n updates
   policy_gradient_loss | 0.000394
   value loss
rollout/
                       | 1.14e+03
   ep len mean
   ep_rew_mean
                       | 1.99e+03
time/
                       | 120
  fps
   iterations
                      | 1785
                     | 7581
   time_elapsed
   total_timesteps
                       913920
train/
  approx kl
                       0.0022219208
   clip_fraction
                       | 0.0197
   clip range
                       0.2
   entropy_loss
                       | -0.667
   explained variance
                     0.862
                       | 1e-06
   learning_rate
                       1 54.6
   n_updates
                       17840
   policy_gradient_loss | -0.00383
   value loss
                       | 133
                       | 1.14e+03
   ep_len_mean
   ep_rew_mean
                       | 1.99e+03
time/
```

fps	120
iterations	i 1786 i
time elapsed	7585
	!
<pre> total_timesteps</pre>	914432
train/	
approx kl	0.006187475
clip fraction	0.0879
· · · · · · · · · · · · · · · · · · ·	1
clip_range	0.2
entropy_loss	-0.87
<pre> explained variance</pre>	0.608
learning rate	i l 1e-06 i
· ·	1 1
loss	274
	17850
<pre>policy_gradient_loss</pre>	0.00282
	1.26e+03
1	1 11200 00
rollout/	
ep len mean	1.14e+03
ep rew mean	1.99e+03
= =	1.996+03
time/	l
fps	120
literations	1787
time elapsed	7589
	'
<pre> total_timesteps</pre>	914944
train/	
approx kl	0.0003252651
clip_fraction	0
clip_range	0.2
entropy_loss	-0.579
explained variance	0.585
	l 1e-06
· · ·	!
loss	86.3
n_updates	17860
<pre>policy_gradient_loss</pre>	-0.00194
	891
1	, ,
rollout/	
ep len mean	1.15e+03
ep rew mean	2e+03
-	
l time/	l I
time/	
fps	
!	
fps	
fps iterations time_elapsed	1788 7593
fps iterations time_elapsed total_timesteps	1788
fps iterations time_elapsed total_timesteps train/	1788 7593 915456
fps iterations time_elapsed total_timesteps train/ approx_kl	1788 7593 915456 0.0047600074
fps iterations time_elapsed total_timesteps train/	1788 7593 915456
fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction	1788
fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range	1788
fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss	1788
fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance	1788
fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate	1788
fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance	1788
fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate	1788
fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance loss n_updates	1788
fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss	1788
fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss	1788
fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss	1788
fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss	1788
fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss	1788
fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss	1788
fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean	1788
fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean	1788
fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean	1788
fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean	1788
fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps	1788
fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations	1788
fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed	1788
fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations	1788
fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed	1788
fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/	1788
fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl	1788
fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction	1788
fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range	1788
fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss	1788
fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss	1788
fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance	1788
fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate	1788
fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss	1788
fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates	1788
fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss n_updates policy_gradient_loss	1788
fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss n_updates policy_gradient_loss	1788
fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_	1788
fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_	1788
fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_	1788
fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss value_loss value_loss value_loss value_loss value_loss rollout/	1788
fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_	1788
fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss value_loss value_loss value_loss value_loss value_loss rollout/	1788

```
time/
                        120
   fps
   iterations
                        1790
   time_elapsed
                        7602
   total timesteps
                      916480
                        0.0013626948
   approx kl
                      | 0.000781
   clip fraction
   clip range
                      0.2
   entropy_loss
                      | -0.59
   explained_variance | 0.823
   learning_rate
                      | 1e-06
                      | 89.7
   loss
                      | 17890
   n_updates
   policy_gradient_loss | -0.00198
   value_loss
                      231
rollout/
                      | 1.15e+03
  ep_len_mean
                     | 2e+03
  ep_rew_mean
time/
                      | 120
  fps
                      | 1791
  iterations
                     | 7606
   time elapsed
  total_timesteps
                      916992
train/
                      | 0.0008663399
  approx_kl
   clip fraction
                      0.00332
  clip_range
                      0.2
   entropy_loss
                      | -0.689
   explained_variance | 0.802
                      | 1e-06
   learning_rate
   loss
                      | 75.9
   n_updates
                      | 17900
   policy_gradient_loss | -0.00142
   value loss
  ep_len_mean
                      | 1.16e+03
  ep_rew_mean
                     | 2.01e+03
time/
  fps
                      1 120
                      | 1792
  iterations
                     | 7610
   time elapsed
   total_timesteps
                      917504
train/
                      0.0021874045
   approx_kl
                     0.00488
   clip_fraction
   clip_range
                     | 0.2
                      | -0.671
   entropy_loss
   explained_variance | 0.577
                    | 1e-06
   learning_rate
                      | 247
   loss
                     17910
   n updates
   policy_gradient_loss | 0.00149
   value loss
                      | 471
rollout/
                     1.16e+03
  ep len mean
   ep rew mean
                      | 2.01e+03
time/
                      | 120
  fps
                     | 1793
   iterations
   time_elapsed
                      | 7614
  total_timesteps
                      | 918016
train/
  approx kl
                      | 0.0013801053
                     | 0.0135
   clip_fraction
   clip range
                      0.2
                      | -0.748
   entropy_loss
   explained variance | 0.841
                      l 1e-06
   learning_rate
                      | 17920
   n updates
   policy gradient loss | 8.53e-05
   value_loss
rollout/
                      | 1.16e+03
  ep_len_mean
```

```
ep rew mean
                       | 2.01e+03
 time/
                       120
    fps
                       | 1794
    iterations
                       | 7619
    time elapsed
    total_timesteps
                      | 918528
                       0.0020257626
    approx kl
                     0.00391
    clip fraction
    clip_range
entropy_loss
                      | 0.2
                       | -0.539
    explained_variance | 0.825
    learning_rate
                      | 1e-06
                       | 159
    loss
                       17930
    n updates
    policy gradient loss | 4.26e-05
    value loss
 rollout/
    ep len mean
                       | 1.16e+03
                       | 2.01e+03
    ep_rew_mean
 time/
                       | 120
   fps
    iterations
                      | 1795
                   7623
    time_elapsed
    total timesteps
                       | 919040
 train/
                       0.0011274064
    approx kl
                      0.00117
    clip_fraction
    clip_range
entropy_loss
                     0.2
-0.669
    explained variance | 0.846
    learning_rate | 1e-06
    loss
                       | 71.9
                       17940
    n_updates
    policy_gradient_loss | 0.000744
    value_loss
 rollout/
                     | 1.17e+03
    ep len mean
    ep rew mean
                       | 2.02e+03
 time/
                       | 120
   fps
                     | 1796
| 7627
| 919552
    iterations
    time_elapsed
    total_timesteps
 train/
                      0.00018995802
    approx kl
                      0.00156
    clip_fraction
    clip range
                      | -0.449
    entropy_loss
    explained_variance | 0.524
    learning_rate | 1e-06
                       | 85.9
                      | 17950
    n_updates
    policy_gradient_loss | 9.44e-05
    value_loss | 187
 rollout/
                     1.17e+03
2.02e+03
    ep len mean
    ep rew mean
 time/
   fps
                       | 120
                       | 1797
    iterations
                     7632
920064
    time elapsed
   total_timesteps
 train/
                       0.0075222435
    approx_kl
                     0.0309
    clip fraction
    clip range
                      | 0.2
    entropy loss
                       -0.681
    explained_variance | 0.912
    learning_rate
                       le-06
                       | 41.1
    loss
                       | 17960
    n_updates
    policy_gradient_loss | -0.00229
    value_loss | 154
| rollout/
```

```
ep len mean
                       | 1.17e+03
   ep_rew_mean
                       | 2.02e+03
time/
                       | 120
  fps
                       | 1798
   iterations
   time_elapsed
                      | 7637
  total timesteps
                     | 920576
train/
                      | 0.0019592238
  approx kl
                      | 0.00859
   clip_fraction
   clip range
                     | 0.2
   entropy_loss
                      | -0.565
   explained variance | 0.893
   learning_rate
                      | 1e-06
   loss
                      17970
   n_updates
   policy gradient loss | -0.00262
   value_loss | 165
rollout/
                      | 1.17e+03
   ep_len_mean
  ep_rew_mean
                     | 2.02e+03
time/
                      | 120
  iterations | 1799
time_elapsed | 7641
total_timesteps | 921088
train/
                      0.0019820633
  approx_kl
                     0.00449
0.2
   clip fraction
   clip range
  entropy_loss
                     | -0.596
   explained_variance | 0.637
   learning_rate | 1e-06
                      291
   loss
                     i 17980
   n updates
   policy_gradient_loss | -0.000736
   value_loss | 714
rollout/
                    | 1.17e+03
| 2.02e+03
   ep len mean
  ep_rew_mean
time/
  fps
                       120
                      | 1800
  iterations
                     7645
  time elapsed
                     921600
  total_timesteps
train/
                      | 0.0020668833
  approx_kl
                     0.00137
   clip_fraction
   clip_range
                     | 0.2
  entropy_loss | -0.583
explained_variance | 0.889
                      | 1e-06
   learning_rate
                      | 44.6
  loss
                      | 17990
   n updates
   policy_gradient_loss | -0.00221
                  | 233
   value loss
rollout/
  ep_len_mean
                     1.18e+03
                     | 2.03e+03
  ep_rew_mean
time/
                       | 120
  fps
  iterations
                      | 1801
                     | 7649
   time_elapsed
   total_timesteps
                     | 922112
train/
  approx kl
                      0.0014410226
                     | 0.00684
   clip_fraction
                     | 0.2
   clip range
                      | -0.473
   entropy_loss
   explained variance | 0.843
                      | 1e-06
   learning_rate
   loss
                       | 28.9
   n updates
                       | 18000
   policy_gradient_loss | -0.00113
                       | 107
   value_loss
```

```
rollout/
                        1.18e+03
   ep len mean
  ep rew mean
                       | 2.03e+03
time/
                       1 120
  fps
                        1802
   iterations
   time elapsed
                        7654
                      922624
   total timesteps
                      | 0.0065491945
  approx_kl
  clip_fraction
                      0.0326
  clip_range
                      0.2
  entropy loss
                      | -0.549
   explained variance | 0.881
   learning rate
                      l 1e-06
  loss
                       1 63.5
                      | 18010
   n updates
   policy gradient loss | -0.00316
   value loss | 164
rollout/
  ep_len_mean
ep_rew_mean
                      | 1.18e+03
                      | 2.03e+03
time/
                      | 120
  fps
   iterations
                      | 1803
   time_elapsed
                      | 7658
  total_timesteps
                      | 923136
train/
                      0.0024446542
   approx kl
                     0.0162
   clip_fraction
   clip_range
                     0.2
  entropy_loss | -0.425
explained_variance | 0.945
                      l 1e-06
   learning_rate
   loss
                      | 38.1
                     | 18020
   n updates
   policy_gradient_loss | -0.00325
   value loss
rollout/
                      | 1.18e+03
  ep len mean
   ep rew mean
                      | 2.03e+03
time/
                      | 120
  fps
                      1804
  iterations
  time_elapsed
                     | 7662
  total_timesteps
                      923648
train/
  approx kl
                      0.0026576067
                      | 0.0285
   clip_fraction
  clip_range
entropy_loss
                      0.2
                      | -0.394
   explained variance | 0.714
  learning_rate
                      | 1e-06
   loss
                      | 95.3
                      | 18030
   n_updates
   policy_gradient_loss | -0.00351
   value_loss
                      | 187
                      | 1.18e+03
   ep_len_mean
  ep_rew_mean
                      2.04e+03
time/
                      | 120
                        1805
   iterations
   time elapsed
                        7666
                     924160
  total_timesteps
                      | 0.0019504927
  approx_kl
   clip fraction
                      0.00977
   clip_range
                      0.2
                       | -0.599
   entropy loss
   explained_variance
                      0.821
   learning_rate
                       | 1e-06
                       | 164
   n updates
                       | 18040
   policy_gradient_loss | -0.000756
   value loss | 263
```

```
rollout/
                        1.18e+03
  ep len mean
   ep rew mean
                       | 2.04e+03
time/
                      | 120
  fps
                        1806
   iterations
   time elapsed
                      | 7670
  total_timesteps
                      924672
train/
                      | 0.0007207417
  approx kl
   clip_fraction
                      0.00156
  clip range
                      0.2
   entropy_loss
                      | -0.473
   explained variance | 0.885
  learning_rate
                       l 1e-06
                       | 322
                      | 18050
   n_updates
   policy_gradient_loss | -0.000115
   value_loss | 273
rollout/
                        1.18e+03
   ep_len_mean
  ep_rew_mean
                      | 2.04e+03
time/
                      | 120
                      | 1807
  iterations
  time elapsed
                     | 7675
  total_timesteps
                     | 925184
                      0.0006855705
  approx_kl
   clip_fraction
                      | 0.00117
                      0.2
   clip_range
   entropy loss
                      | -0.4
   explained_variance | 0.869
   learning_rate
                      | 1e-06
                      | 51.4
  loss
   n_updates
                      | 18060
   policy_gradient_loss | -1.82e-05
                      | 317
   value_loss
rollout/
                      | 1.18e+03
   ep len mean
  ep_rew_mean
                      2.04e+03
time/
  fps
                      120
  iterations
                      | 1808
                     | 7679
   time elapsed
   total_timesteps
                       925696
train/
                      | 0.0004298332
  approx_kl
                      0.000977
   clip fraction
  clip_range
entropy_loss
                      0.2
                      | -0.424
   explained_variance | 0.921
   learning_rate
                      | 1e-06
                       1 70
   loss
                       18070
   n updates
   policy_gradient_loss | -0.00117
   value loss
                       | 146
                     | 1.2e+03
  ep_len_mean
                      | 2.06e+03
  ep_rew_mean
time/
                       | 120
  fps
                        1809
   iterations
   time_elapsed
                        7683
   total_timesteps
                      926208
train/
   approx kl
                      0.00025747775
   clip fraction
   clip range
                      0.2
                      | -0.466
   entropy_loss
   explained variance
                      | 0.815
   learning_rate
                       | 1e-06
   loss
                       | 83.2
                        18080
   n_updates
   policy_gradient_loss | 0.000164
   value_loss
                       | 196
```

rollout/ ep_len_mean | 1.2e+03 ep rew mean | 2.06e+03 time/ fps | 120 | 1810 iterations time elapsed | 7687 total_timesteps | 926720 train/ 0.000985453 approx_kl clip_fraction 0.00156 clip_range | 0.2 entropy_loss | -0.587 explained_variance | 0.91 l 1e-06 learning_rate | 54.6 loss n updates 18090 policy_gradient_loss | -0.00136 value_loss | 150 ep_len_mean ep_rew_mean | 1.2e+03 2.06e+03 time/ | 120 fps iterations time_elapsed 7691 927232 total timesteps train/ approx_kl 0.002844097 | 0.0043 | 0.2 | -0.713 clip_fraction clip_range entropy_loss explained variance | 0.846 learning_rate | 1e-06 | 287 | 18100 n_updates policy_gradient_loss | -0.00215 value_loss | 685 ep_len_mean | 1.19e+03 ep_rew_mean | 2.05e+03 time/ | 120 fps | 1812 iterations | 7696 time_elapsed total_timesteps | 927744 0.005604904 approx kl clip_fraction clip range entropy_loss | -0.608 explained_variance | 0.932 learning_rate | 1e-06 loss | 61.3 18110 n_updates policy gradient loss | -0.00395 value loss | 149 rollout/ ep_len_mean | 1.19e+03 ep_rew_mean | 2.05e+03 time/ | 120 fps iterations | 1813 time elapsed | 928256 total_timesteps train/ approx kl 0.0030716397 clip fraction 0.0143 clip_range entropy_loss | 0.2 | -0.54 explained_variance | 0.935 learning_rate | 1e-06 70.1 n updates policy_gradient_loss | -0.001

value loss	220
_	
rollout/	
ep_len_mean	1.19e+03
ep_rew_mean	2.05e+03
time/ fps	
ips iterations	120 1814
time_elapsed	7704
total_timesteps	928768
train/ approx kl	
clip fraction	0.0022170707
clip_range	0.2
entropy_loss	-0.655
<pre> explained_variance learning rate</pre>	0.711 1e-06
loss	235
n_updates	18130
<pre>policy_gradient_loss value_loss</pre>	0.00115 722
vatue_t033	
rollout/	
ep_len_mean ep rew mean	1.19e+03 2.05e+03
time/	
fps	120
iterations time elapsed	1815 7708
total timesteps	7700 929280
train/	
approx_kl	0.0021455935
<pre> clip_fraction clip range</pre>	0.0129 0.2
entropy_loss	-0.463
<pre> explained_variance</pre>	0.943
learning_rate	1e-06
loss n updates	41.4 18140
policy_gradient_loss	-0.0038
value_loss	154
rollout/	l I
ep_len_mean	1.19e+03
ep_rew_mean time/	2.06e+03
fps	120
iterations	1816
time_elapsed	7713
<pre> total_timesteps train/</pre>	929792
approx_kl	0.0018432601
clip_fraction	0.00195
<pre> clip_range entropy_loss</pre>	0.2 -0.527
entropy_toss explained variance	0.563
learning_rate	l 1e-06
l loss	107
<pre> n_updates policy gradient loss</pre>	18150 -0.00291
value_loss	521
rollout/	I I
ep_len_mean	1.19e+03
ep_rew_mean	2.06e+03
time/ fps	
iterations	1817
time_elapsed	7718
total_timesteps	930304
train/ approx kl	 0.0026064669
clip_fraction	0.0168
clip_range	0.2
entropy_loss	-0.527
<pre> explained_variance learning rate</pre>	0.925 1e-06
loss	46.8
n_updates	18160

policy_gradient_loss value_loss	-0.00286 198
rollout/	
ep len mean	1.19e+03
ep_rew_mean	2.06e+03
time/	
fps	120
iterations	1818
time_elapsed	7722
total_timesteps	930816
train/	
approx_kl	0.0012116953
<pre> clip_fraction clip range</pre>	0.00391 0.2
entropy_loss	0.2 -0.415
explained variance	0.845
learning rate	l 1e-06
loss	39.6
n updates	18170
	-0.00167
value_loss	126
rollout/	
ep_len_mean	1.2e+03
ep_rew_mean	2.06e+03
time/	
fps iterations	120 1819
time elapsed	7726
total timesteps	931328
train/	331320
approx kl	0.0013834757
clip_fraction	0.00234
clip range	0.2
entropy loss	-0.539
explained_variance	0.875
learning_rate	1e-06
loss	42.4
n_updates	18180
policy_gradient_loss	-0.00169
value_loss	160
rollout/	
ep len mean	1.2e+03
ep rew mean	2.06e+03
time/	i i
fps	120
iterations	1820
time_elapsed	7730
total_timesteps	931840
train/	
approx_kl	0.004213942 0.0469
clip_fraction	0.0409
clip_range	0.2
<pre> entropy_loss explained variance</pre>	-0.477
learning rate	1e-06
l loss	500
n updates	18190
policy_gradient_loss	-0.00284
value_loss	871
rollout/	
ep_len_mean	1.2e+03
ep_rew_mean	2.06e+03
time/ fps	
ips iterations	120 1821

iterations
time_elapsed
total_timesteps

clip_fraction
clip_range
entropy_loss
explained_variance
learning_rate

approx_kl

loss

| train/

1821 7735 932352

0.0041 0.2 -0.605 0.922 1e-06

41.8

0.0022793221

n updates	18200
policy_gradient_loss	
value_loss	113
rollout/	
ep len mean	
ep rew mean	2.08e+03
time/	j j
fps	120
iterations	1822
time_elapsed	7739
total_timesteps	932864
train/ approx_kl	
clip_fraction	0.0025522510
clip range	0.2
entropy_loss	-0.646
<pre> explained_variance </pre>	0.861
!	1e-06
loss	95.8
<pre> n_updates policy gradient loss </pre>	18210
value_loss	-0.000//1 177
•••••	· · · · · · · · · · · · · · · · · · ·
rollout/	
ep_len_mean	1.21e+03
ep_rew_mean	2.08e+03
time/	
fps iterations	1823
time elapsed	7743
total timesteps	933376
train/	i i
approx_kl	0.0023297356
clip_fraction	0.00625
clip_range	0.2
' ',=	-0.72
<pre> explained_variance learning rate</pre>	0.595 1e-06
• •= •	535
n updates	18220
policy_gradient_loss	0.00101
value_loss	927
rollout/	
ep len mean	1.21e+03
ep rew mean	2.08e+03
time/	İ
fps	120
iterations	1824
time_elapsed	7747
<pre> total_timesteps train/</pre>	933888
approx kl	 0.00039101054
clip fraction	0.00039101034
clip range	0.2
entropy_loss	-0.533
explained_variance	0.854
learning_rate	1e-06
loss	71.7
n_updates	18230
<pre>policy_gradient_loss value loss</pre>	-0.000821 179
'4446655	
rollout/	
ep_len_mean	1.21e+03
ep_rew_mean	2.08e+03
time/ fps	
iterations	1825
time elapsed	7752
total_timesteps	934400
train/	į į

train/

ann/
approx_kl
clip_fraction
clip_range
entropy_loss
explained_variance
learning_rate

| 0.004167149 | | 0.00703 | | 0.2 | | -0.621 | | 0.885 | | 1e-06 |

```
loss
                      | 57.2
                      | 18240
   n_updates
   policy_gradient_loss | -0.00122
   value loss | 103
rollout/
   ep_len_mean
                        1.22e+03
  ep_rew_mean
                      | 2.08e+03
time/
  fps
                      | 120
                      | 1826
  iterations
  time elapsed
                      | 7756
  total_timesteps
                      | 934912
train/
                      | 0.0003396686
  approx_kl
   clip fraction
                      0.00254
                      0.2
   clip_range
   entropy_loss
                      | -0.528
   explained_variance | 0.867
                      | 1e-06
   learning_rate
                      | 59.6
   loss
                      | 18250
   n updates
   policy_gradient_loss | -0.000402
   value loss
                      | 155
rollout/
                      | 1.22e+03
  ep len mean
  ep_rew_mean
                      | 2.08e+03
time/
                      | 120
  fps
                      | 1827
  iterations
                     | 7760
   time_elapsed
   total timesteps
                      935424
train/
  approx kl
                      0.0013994679
                      0.00254
   clip_fraction
   clip_range
                      0.2
   entropy_loss
                      | -0.59
   explained_variance | 0.896
                     | 1e-06
   learning_rate
                      | 43.1
   n_updates
                      | 18260
   policy_gradient_loss | -0.00519
   value_loss | 164
  ep len mean
                     | 1.22e+03
  ep_rew_mean
                      | 2.08e+03
time/
  fps
                      | 120
   iterations
                        1828
   time_elapsed
                      | 7764
  total_timesteps
                      935936
train/
  approx kl
                      | 0.0007313803
   clip_fraction
                      0.2
   clip_range
                      | -0.721
   entropy_loss
   explained_variance | 0.932
   learning_rate
                      I 1e-06
   loss
                      | 18270
   n_updates
   policy_gradient_loss | -0.000271
   value_loss
rollout/
  ep_len_mean
                        1.22e+03
                      | 2.08e+03
  ep_rew_mean
time/
                      | 120
  fps
                      | 1829
   iterations
   time_elapsed
                      7768
  total_timesteps
                      936448
train/
                      0.0027128097
   approx_kl
   clip fraction
                      0.0215
                      0.2
   clip_range
   entropy loss
                      | -0.415
   explained_variance
                     0.804
```

```
learning_rate
                      | 1e-06
                      | 43.3
  n_updates
                      18280
   policy_gradient_loss | -0.00194
   value_loss | 110
  ep_len_mean
ep_rew_mean
                      | 1.22e+03
                    2.09e+03
time/
                      | 120
  fps
                     | 1830
  iterations
   time_elapsed
                    | 7773
                    | 936960
  total timesteps
train/
  approx kl
                      0.00045829406
   clip fraction
                    | 0
  clip_range
entropy_loss
                     | 0.2
                      | -0.454
   explained variance | 0.808
                    | 1e-06
   learning_rate
   loss
                      | 61.9
              | 18290
   n_updates
   policy_gradient_loss | -0.00095
   value_loss | 240
rollout/
                    | 1.22e+03
  ep_len_mean
  ep rew mean
                     | 2.09e+03
time/
                      | 120
                    | 1831
  iterations
                    | 7777
  time_elapsed
  total_timesteps
                      | 937472
train/
                    0.00054817833
0.00332
0.2
  approx_kl
   clip_fraction
  clip_range
entropy_loss
                    | -0.401
   explained_variance | 0.452
   learning_rate | 1e-06
                     | 83.1
   loss
             | 18300
   n updates
   policy_gradient_loss | -0.00078
   value loss
rollout/
                      | 1.22e+03
  ep_len_mean
                      | 2.09e+03
  ep_rew_mean
time/
                     | 120
  fps
   iterations
                     | 1832
                    7781
  time elapsed
                    | 937984
  total_timesteps
train/
                      | 0.001964232
  approx_kl
   clip fraction
                     0 00488
  clip_range
                    | 0.2
  entropy_loss | -0.62
explained_variance | 0.927
                     | 1e-06
   learning_rate
                     | 141
   n updates
                     | 18310
   policy_gradient_loss | -0.00123
   value_loss | 230
rollout/
                      | 1.22e+03
   ep len mean
                     | 2.09e+03
  ep_rew_mean
time/
                      | 120
  fps
  iterations
                     | 1833
                    | 7785
  time_elapsed
  total_timesteps
                     | 938496
train/
                      0.0006215486
  approx kl
                     0.000391
   clip_fraction
   clip range
                      0.2
                      | -0.464
   entropy_loss
```

```
explained variance
                     | 0.661
   learning_rate
                      | 1e-06
                      48.1
   loss
                      | 18320
   n_updates
   policy_gradient_loss | -0.00173
   value loss
                        1.22e+03
   ep_len_mean
  ep_rew_mean
                      | 2.09e+03
time/
  fps
                      | 120
   iterations
                      | 1834
   time elapsed
  total timesteps
                     | 939008
                      | 0.001884234
  approx_kl
  clip fraction
                      0.00684
   clip_range
                      0.2
                      | -0.425
   entropy_loss
   explained_variance | 0.863
                    | 1e-06
   learning_rate
                      | 42.8
   n updates
                     | 18330
   policy_gradient_loss | -0.00189
   value loss | 102
rollout/
   ep len mean
                      | 1.23e+03
  ep_rew_mean
                      | 2.11e+03
                      | 120
  fps
                      | 1835
   iterations
                      | 7794
  time_elapsed
  total_timesteps
                      | 939520
train/
   approx_kl
                      0.0014954049
   clip_fraction
                      0.0043
   clip_range
                     | 0.2
                      | -0.454
   entropy_loss
   explained_variance | 0.8
                      | 1e-06
   learning_rate
                      | 57.1
                      | 18340
   n updates
   policy_gradient_loss | -0.000335
   value loss | 215
                      | 1.23e+03
  ep_len_mean
   ep_rew_mean
                      | 2.11e+03
time/
                      | 120
  fps
  iterations
                      | 1836
                    | 7799
   time_elapsed
  total_timesteps
                      940032
train/
                      0 00055564346
  approx kl
   clip_fraction
                      | 0
   clip range
                      0.2
   entropy_loss
                      | -0.396
   explained variance | 0.679
   learning_rate
                      | 1e-06
   loss
                      | 400
                      | 18350
   n_updates
   policy_gradient_loss | -0.00264
   value_loss
                      | 1.23e+03
  ep len mean
                      2.11e+03
  ep rew mean
time/
                      | 120
  fps
                      | 1837
  iterations
                      | 7803
   time elapsed
  total_timesteps
                      940544
train/
                      | 0.0018951222
   approx_kl
   clip fraction
                      | 0.0109
   clip_range
                      0.2
```

<pre> entropy_loss explained_variance learning_rate loss n_updates policy_gradient_loss value_loss</pre>	-0.354
rollout/	
ep_len_mean	1.23e+03 2.11e+03
ep_rew_mean time/	2.116+05
fps	120
iterations	1838
time_elapsed	7807
<pre> total_timesteps train/</pre>	941056
approx kl	
clip_fraction	0.0287
clip_range	0.2
entropy_loss	-0.495
<pre> explained_variance learning rate</pre>	0.926 1e-06
loss	38.8
n_updates	18370
1 1 1 1 1	-0.00416
value_loss	139
rollout/	l I
ep_len_mean	1.22e+03
ep_rew_mean	2.1e+03
time/	
fps iterations	1839
time elapsed	7812
total_timesteps	941568
train/	
approx_kl clip_fraction	0.0009898441 0.00293
clip_rraction	0.00293
entropy_loss	-0.419
explained_variance	0.647
learning_rate	1e-06
loss n updates	50.3 18380
policy_gradient_loss	
value_loss	125
rollout/	
ep len mean	1.22e+03
ep_rew_mean	2.1e+03
time/	
fps iterations	120 1840
time elapsed	7816
total_timesteps	942080
train/	
approx_kl	0.0020199087
<pre> clip_fraction clip_range</pre>	0.0316 0.2
entropy loss	-0.41
• • • • • • • • • • • • • • • • • • • •	0.254
learning_rate	le-06
loss	503
. – .	18390 -0.00412
	1.5e+03
mallant/	
rollout/ ep len mean	
ep rew mean	2.1e+03
time/	İ
fps	120
iterations	1841
<pre> time_elapsed total timesteps </pre>	7820 942592
train/	
approx_kl	0.0010801618
clip_fraction	0.00195

clip range	0.2
entropy_loss	-0.582
explained variance	0.763 i
• • =	l 1e-06
l loss	55.3
n updates	18400
	-0.00152
value_loss	174
value_toss	1/4
rollout/	
ep len mean	1.22e+03
ep rew mean	2.1e+03
time/	
fps	120
iterations	1842
time elapsed	7824
total timesteps	943104
train/	343104
approx kl	
	0.002033201
clip_fraction	'
clip_range	0.2
1 13	-0.475
explained_variance	0.87
learning_rate	1e-06
loss	91.7
n_updates	18410
<pre>policy_gradient_loss</pre>	
value_loss	174
rollout/	
ep_len_mean	1.22e+03
ep_rew_mean	2.1e+03
time/	
fps	120
iterations	1843
time_elapsed	7829
<pre>total_timesteps</pre>	943616
train/	
approx_kl	0.00093622645
clip_fraction	0
clip_range	0.2
entropy_loss	-0.676
<pre> explained_variance</pre>	0.935
learning_rate	le-06
loss	40.8
n updates	18420
policy_gradient_loss	-0.00117
value_loss	140
rollout/	
ep_len_mean	1.22e+03
ep_rew_mean	2.1e+03
time/	i i
fps	120
iterations	1844
time_elapsed	7833
total_timesteps	944128
train/	į į
approx_kl	0.0018546756
clip_fraction	0.0111
clip_range	0.2
entropy_loss	-0.401
explained variance	0.931
learning_rate	le-06
loss	17.4
n updates	18430
	-0.00286
value_loss	84.7
· · · · · · · · · · · · · · · · · · ·	
rollout/	
ep len mean	1.22e+03
ep rew mean	2.1e+03
time/	
fps	120
iterations	1845
time elapsed	'
total timesteps	7837
	7837 944640
train/	

```
clip_fraction
                      | 0.00781
   clip_range
                      0.2
   entropy_loss
                      -0.37
   explained_variance | 0.783
   learning_rate
                      | 1e-06
                      | 63.5
  n_updates | 18440
policy_gradient_loss | -0.000924
   value loss | 262
rollout/
  ep len mean
                        1.22e+03
                     | 2.1e+03
  ep_rew_mean
time/
                      | 120
  fps
  iterations
                      | 1846
                     | 7841
  time elapsed
  total timesteps
                      945152
train/
                      | 0.0017651024
  approx kl
   clip_fraction
                     | 0.00352
  clip_range
entropy_loss
                      0.2
                     -0.634
   explained variance | 0.774
   learning_rate
                    | 1e-06
                      | 69.7
                      | 18450
  n_updates
   policy_gradient_loss | -0.00309
   value_loss
              | 512
  ep_len_mean
                     | 1.22e+03
  ep_rew_mean
                      | 2.09e+03
time/
  fps
                      | 120
                      | 1847
  iterations
   time_elapsed
                     | 7845
  total_timesteps
                     945664
                      0.00068223185
  approx_kl
   clip fraction
                      | 0.00117
                     0.2
   clip range
   entropy loss
                     | -0.49
   explained_variance | 0.912
   learning_rate
                      | 1e-06
   loss
                      76.3
   n_updates
                     | 18460
   policy_gradient_loss | -0.000484
   value_loss | 177
rollout/
  ep_len_mean
                      | 1.22e+03
  ep rew mean
                      | 2.09e+03
time/
  fps
                      | 120
                      | 1848
   iterations
   time elapsed
                      | 7850
  total_timesteps
                      | 946176
train/
                      0.0020427015
   approx_kl
   clip fraction
                     0.024
   clip_range
                     0.2
                      -0.481
   entropy_loss
   explained_variance | 0.738
   learning_rate
                      | 1e-06
                      | 390
   loss
                      | 18470
   n updates
   policy_gradient_loss | -0.00409
rollout/
  ep len mean
                      1.22e+03
                      | 2.09e+03
  ep_rew_mean
time/
                      | 120
   iterations
                      | 1849
                      | 7854
   time_elapsed
   total_timesteps
                      946688
train/
```

learning_rate	0.0019204515 0.0133 0.2 -0.48 0.915 1e-06 67.7 18480 -0.00174 215
rollout/	
ep_len_mean	1.22e+03
ep_rew_mean time/	2.09e+03
fps	120
iterations time elapsed	1850 7858
total_timesteps	947200
train/ approx kl	 0.001704805
clip_fraction	0.00859
<pre> clip_range entropy_loss</pre>	0.2 -0.484
explained_variance	0.887
learning_rate loss	1e-06 113
n_updates	18490
<pre>policy_gradient_loss value_loss</pre>	-0.00274 257
rollout/	
ep_len_mean	1.23e+03
<pre> ep_rew_mean time/</pre>	2.1e+03
fps	120
iterations time elapsed	1851 7862
total_timesteps	947712
train/ approx kl	 0.0004935501
clip_fraction	0
<pre> clip_range entropy_loss</pre>	0.2 -0.521
<pre> explained_variance </pre>	0.902
<pre> learning_rate loss</pre>	1e-06 120
n_updates	18500
<pre>policy_gradient_loss value_loss</pre>	-0.000769 225
rollout/	
ep_len_mean	1.23e+03
ep_rew_mean time/	2.1e+03
fps	120
iterations time elapsed	1852 7867
total_timesteps	948224
train/ approx kl	 0.004573835
clip_fraction	0.0193
<pre> clip_range entropy loss</pre>	0.2 -0.659
explained_variance	0.297
<pre> learning_rate loss</pre>	1e-06 207
n_updates	18510
<pre>policy_gradient_loss value_loss</pre>	-0.00436 1.14e+03
	1.146+05
rollout/	
ep_len_mean	1.22e+03
ep_rew_mean time/	2.09e+03
time/ fps	120
iterations	1853
<pre> time_elapsed total_timesteps</pre>	7871 948736
_ ·	'

```
train/
                       0.0019962867
   approx kl
   clip fraction
                      0.00391
                      0.2
   clip_range
                      | -0.774
   entropy_loss
   explained_variance | 0.944
                      i 1e-06
   learning_rate
                      | 58.4
   n updates
                      | 18520
   policy_gradient_loss | -0.00142
   value_loss | 168
rollout/
   ep len mean
                        1.22e+03
                      | 2.09e+03
  ep rew mean
time/
                      | 120
  fps
   iterations
                      | 1854
                      | 7875
   time_elapsed
  total_timesteps
                      949248
train/
                      0.0029364198
   approx kl
   clip_fraction
                      | 0.0154
   clip range
                      0.2
                      | -0.577
   entropy_loss
   explained_variance | 0.854
                      | 1e-06
   learning_rate
                      | 79.2
   loss
                      | 18530
   n_updates
   policy gradient loss | -0.00171
   value_loss | 237
rollout/
                      | 1.23e+03
  ep_len_mean
   ep_rew_mean
                     | 2.1e+03
time/
  fps
                      | 120
                      | 1855
  iterations
                     | 7879
   time_elapsed
  total_timesteps
                      949760
train/
                      0.002980146
  approx kl
   clip_fraction
                      | 0.0135
  clip_range
entropy_loss
                      0.2
                      | -0.663
   explained_variance | 0.58
   learning_rate
                      | 1e-06
   loss
                      | 91.4
   n_updates
                       | 18540
   policy_gradient_loss | 8.85e-05
   value loss
  ep_len_mean
                     | 1.23e+03
  ep_rew_mean
                      | 2.1e+03
time/
  fps
                       | 120
                      | 1856
   iterations
                        7884
   time elapsed
  total timesteps
                      | 950272
train/
                      | 0.0034267348
   approx_kl
   clip_fraction
                      0.0268
   clip_range
                      0.2
   entropy_loss
                      | -0.706
   explained_variance | 0.905
                     | 1e-06
   learning_rate
                      | 93.3
   loss
   n updates
                      | 18550
   policy_gradient_loss | -0.00396
   value loss
                       | 227
rollout/
  ep len mean
                      | 1.23e+03
  ep_rew_mean
                      | 2.09e+03
time/
                      | 120
  fps
   iterations
                        1857
                       | 7889
   time_elapsed
```

```
{\tt total\_timesteps}
                      | 950784
train/
  approx kl
                      0.0018203397
  clip_fraction
                      0.000977
                      0.2
  clip range
                      | -0.671
  entropy_loss
  explained variance | 0.898
                      | 1e-06
  learning_rate
                      61.6
  loss
  n_updates
                      | 18560
  policy_gradient_loss | -0.00169
  value loss
              | 146
rollout/
  ep len mean
                       1.22e+03
  ep_rew_mean
                      2.08e+03
time/
  fps
                      120
                      | 1858
  iterations
  time elapsed
                     | 7893
  total_timesteps
                      | 951296
train/
                      | 0.0021539074
  approx_kl
  clip fraction
                     | 0.0131
  clip_range
                     | 0.2
  entropy_loss
                      | -0.721
  explained_variance | 0.967
  learning_rate
                      le-06
                      | 77.1
  loss
  n_updates
                      | 18570
  policy_gradient_loss | 0.000306
  value loss
rollout/
  ep len mean
                      | 1.22e+03
                      | 2.08e+03
  ep_rew_mean
time/
                      | 120
                     | 1859
  iterations
  time_elapsed
                    | 7897
  total timesteps
                      | 951808
train/
                      0.0005460689
  approx kl
  clip fraction
                     0.00117
  clip_range
entropy_loss
                      0.2
                      | -0.593
  explained_variance | 0.761
  learning_rate | 1e-06
  loss
                      | 110
  n updates
                      | 18580
  policy_gradient_loss | -0.000975
  value loss
                      | 416
rollout/
                    | 1.22e+03
  ep len mean
  ep_rew_mean
                      | 2.08e+03
time/
                      | 120
  fps
  iterations
                      1860
                      | 7901
  time_elapsed
  total timesteps
  approx kl
                      | 0.002832472
  clip_fraction
                      0.00625
  clip range
                      0.2
                      | -0.64
  entropy_loss
  explained_variance | 0.85
                      | 1e-06
  learning_rate
                      | 174
                      | 18590
  n_updates
  policy_gradient_loss | -0.00313
  value loss
                      | 234
rollout/
  ep_len_mean
                      | 1.22e+03
  ep_rew_mean
                      | 2.08e+03
time/
                       120
  fps
                      | 1861
  iterations
```

```
time elapsed
                      | 7905
                      | 952832
  total_timesteps
train/
                      0.0021826662
  approx_kl
                      0.00547
  clip fraction
  clip_range
                      0.2
                      i -0.589
  entropy loss
  explained_variance | 0.879
                      le-06
  learning_rate
                      | 77.1
  loss
                      | 18600
  n updates
  policy_gradient_loss | -0.00393
                      | 124
  value loss
rollout/
  ep len mean
                      | 2.08e+03
  ep rew mean
time/
                      | 120
  fps
  iterations
                      | 1862
  time_elapsed
                     | 7910
  total_timesteps
                     | 953344
train/
  approx kl
                      0.0006403482
                     | 0.0105
  clip_fraction
  clip range
                     0.2
  entropy_loss
                      | -0.622
  explained variance | 0.793
                      | 1e-06
  learning_rate
                      | 153
  n updates
                      1 18610
  policy gradient loss | 0.0016
  value_loss | 409
                     | 1.22e+03
  ep_len_mean
  ep_rew_mean
                     | 2.08e+03
time/
                      | 120
                     | 1863
  iterations
                    7914
  time elapsed
  total_timesteps
                      953856
                      0.0027899616
  approx kl
  clip_fraction
                     | 0.0191
  clip range
                      0.2
  entropy_loss
                     | -0.507
  explained_variance | 0.84
  learning_rate
                      | 1e-06
                      | 55.7
  loss
  n updates
                      | 18620
  policy_gradient_loss | -0.00249
  value_loss | 152
rollout/
                     | 1.22e+03
  ep_len_mean
  ep_rew_mean
                     | 2.08e+03
time/
                      120
  fps
                      | 1864
  iterations
  time elapsed
                     954368
  total_timesteps
train/
                      0.0043531293
  approx_kl
  clip_fraction
                      | 0.0197
  clip_range
                      0.2
  entropy_loss
                     | -0.747
  explained_variance | 0.964
  learning_rate
                      | 1e-06
                      | 56.8
  loss
                      18630
  n updates
  policy gradient loss | -0.00486
  value loss
                      | 1.22e+03
  ep len mean
                      | 2.08e+03
  ep_rew_mean
time/
                      | 120
  fps
```

```
iterations
                       | 1865
   time_elapsed
                        7922
   total timesteps
                       954880
train/
                       0.00036886334
   approx kl
   clip_fraction
                       0.2
   clip range
   entropy_loss
                       | -0.497
   explained variance
                     0.938
   learning_rate
                       | 1e-06
                        31.9
   loss
   n_updates
                       | 18640
   policy_gradient_loss | -6.09e-05
                       | 89.8
   value_loss
   ep_len_mean
ep_rew_mean
                        1.23e+03
                       2.09e+03
time/
                       | 120
  fps
   iterations
                         1866
   time elapsed
                         7927
   total_timesteps
                       | 955392
                       | 0.0006234476
   approx_kl
   clip fraction
                       0.00117
                       0.2
   clip_range
   entropy loss
                       | -0.49
   explained_variance | 0.819
   learning_rate
                       | 1e-06
   loss
                       1 102
   n_updates
                       | 18650
   policy_gradient_loss | -0.000873
   value loss
rollout/
   ep_len_mean
                       | 1.23e+03
   ep_rew_mean
                       | 2.09e+03
time/
   fps
                       | 120
                       | 1867
   iterations
                       7931
   time elapsed
   total_timesteps
                       | 955904
train/
                       0.0002446965
   approx_kl
   clip fraction
                      0.00176
   clip_range
                      0.2
                       | -0.524
   entropy_loss
   explained_variance | 0.712
   learning_rate
                       | 1e-06
   loss
                       | 131
   n updates
                        18660
   policy_gradient_loss | 0.00136
   value loss
rollout/
                       | 1.22e+03
   ep len mean
   ep_rew_mean
                       | 2.08e+03
time/
                       | 120
   fps
   iterations
                      1868
                     | 7935
   time_elapsed
   total_timesteps
                       956416
train/
   approx kl
                       | 0.0027909668
   clip_fraction
                       0.0172
   clip range
                       0.2
   entropy_loss
                       | -0.702
   explained variance
                     | 0.871
                       | 1e-06
   learning_rate
                        110
   n_updates
                       18670
   policy_gradient_loss | -0.00142
   value loss
                       | 1.22e+03
   ep_len_mean
   ep_rew_mean
                       | 2.07e+03
time/
```

```
fps
                      | 120
                      | 1869
   iterations
   time_elapsed
                       7939
   total_timesteps
                      | 956928
train/
                      | 0.00396841
   approx kl
   clip fraction
                     0.023
   clip_range
                      0.2
   entropy_loss
                     -0.506
   explained_variance | 0.958
   learning_rate
                    | 1e-06
                      | 33.9
   loss
                      | 18680
   n updates
   policy_gradient_loss | -0.00621
   value loss
rollout/
   ep len mean
                       1.22e+03
  ep_rew_mean
                      | 2.07e+03
time/
                      | 120
  fps
   iterations
                     | 1870
                     | 7944
   time elapsed
                    957440
  total timesteps
train/
                     | 0.0030025546
  approx kl
   clip_fraction
                     0.05
   clip_range
                     0.2
                     | -0.486
   entropy_loss
   explained variance | 0.523
  learning_rate
                      l 1e-06
                      303
   n updates
                      | 18690
   policy gradient loss | -0.00158
   value_loss | 780
rollout/
  ep_len_mean
                      | 1.22e+03
  ep_rew_mean
                     | 2.07e+03
time/
                      | 120
                     | 1871
  iterations
  time_elapsed
                    | 7948
  total_timesteps
                    | 957952
train/
                      0.0025557475
  approx kl
   clip_fraction
                     | 0.0102
   clip_range
                     0.2
   entropy_loss
                      | -0.438
   explained_variance | 0.904
   learning_rate
                     | 1e-06
   loss
                      | 55.9
                      | 18700
   n updates
   policy_gradient_loss | -0.00166
   value_loss | 169
rollout/
                     | 1.22e+03
  ep_len_mean
  ep rew mean
                     2.07e+03
time/
                      120
                     | 1872
   iterations
   time elapsed
                       7952
   total_timesteps
                      958464
train/
                      | 0.0012961504
  approx_kl
   clip fraction
                     0.00586
                      0.2
   clip_range
   entropy loss
                     | -0.49
   explained variance | 0.901
   learning rate
                      le-06
   loss
                      66.7
   n_updates
                      | 18710
   policy_gradient_loss | -0.000886
rollout/
  ep len mean
                     | 1.21e+03
                     | 2.06e+03
   ep_rew_mean
```

```
time/
                         120
   fps
   iterations
                         1873
                        7956
   time_elapsed
                       958976
   total_timesteps
train/
                         0.0008932791
   approx kl
   clip_fraction
                       | 0.00176
   clip range
                       0.2
   entropy_loss
                       | -0.488
   explained_variance | 0.933
                       | 1e-06
   learning_rate
                       | 113
   loss
                       | 18720
   n_updates
   policy_gradient_loss | -0.00132
   value_loss
                       | 221
rollout/
                        1.21e+03
   ep_len_mean
                     | 2.06e+03
   ep_rew_mean
time/
                       | 120
  fps
                       1874
   iterations
                      | 7960
   time elapsed
   total_timesteps
                       959488
train/
                       | 0.0022309658
  approx_kl
   clip fraction
                      0.00781
   clip_range
entropy_loss
                       0.2
                      | -0.311
   explained_variance | 0.382
   learning_rate
                       | 1e-06
   loss
                       1 180
   n updates
                       | 18730
   policy_gradient_loss | -0.00233
   value loss
   ep_len_mean
                       | 1.2e+03
  ep_rew_mean
                      | 2.06e+03
time/
  fps
                       1 120
   iterations
                       | 1875
   time elapsed
                        7965
   total_timesteps
                       960000
train/
                      0.003730049
   approx_kl
                      0.0385
   clip_fraction
   clip_range
                      0.2
                       | -0.45
   entropy_loss
   explained_variance | 0.606
                      l 1e-06
   learning_rate
                       | 241
   loss
                      18740
   n updates
   policy_gradient_loss | 0.00157
   value loss
                       | 628
rollout/
                      | 1.2e+03
   ep len mean
   ep rew mean
                       | 2.06e+03
time/
                       | 120
   fps
   iterations
                        1876
                       | 7970
   time_elapsed
   {\tt total\_timesteps}
                       | 960512
train/
   approx kl
                      | 0.0013414036
                      | 0.00332
   clip_fraction
   clip range
                      0.2
   entropy_loss
                       | -0.604
   explained variance | 0.904
                       l 1e-06
   learning_rate
   loss
                       | 18750
   n updates
   policy gradient loss | -0.00223
   value_loss
rollout/
                       | 1.2e+03
  ep_len_mean
```

```
ep rew mean
                       | 2.05e+03
 time/
                         120
    fps
                       | 1877
    iterations
                       | 7974
    time elapsed
    total_timesteps
                       961024
                       0.00011847832
    approx_kl
    clip fraction
    clip_range
                      | 0.2
    entropy_loss
                      | -0.368
    explained_variance | 0.902
    learning_rate
                       l 1e-06
                       | 123
    loss
    n updates
                       18760
    policy gradient loss | -0.000478
    value loss
 rollout/
    ep len mean
                       | 1.2e+03
                       | 2.05e+03
    ep_rew_mean
 time/
                       120
   fps
    iterations
                      | 1878
    time_elapsed
                     | 7978
    total timesteps
                       | 961536
 train/
    approx kl
                       0.0017572354
                      0.0158
    clip_fraction
    clip_range
entropy_loss
                      0.2
                      -0.344
    explained variance | 0.487
    learning_rate | 1e-06
    loss
                       | 188
    n_updates
                       18770
    policy_gradient_loss | -0.000905
    value_loss
 rollout/
                     | 1.19e+03
    ep len mean
    ep rew mean
                       | 2.05e+03
 time/
                       | 120
   fps
                      | 1879
    iterations
                     | 7982
| 962048
    time_elapsed
    total timesteps
 train/
                      | 0.002476695
    approx kl
                      | 0.0139
    clip_fraction
                      0.2
    clip range
                      | -0.455
    entropy_loss
    explained_variance | 0.808
                  | 1e-06
    learning_rate
                       69.1
                      | 18780
    n_updates
    policy_gradient_loss | 0.00235
    value_loss | 286
 rollout/
                     1.19e+03
2.05e+03
    ep len mean
    ep rew mean
 time/
                       120
   fps
    iterations
                       | 1880
    time elapsed
                      | 7987
                      | 962560
   total_timesteps
 train/
                       0.0014723872
    approx_kl
    clip fraction
                      | 0.0107
    clip_range
                      | 0.2
    entropy loss
                       | -0.488
    explained_variance | 0.667
    learning_rate
                       le-06
                       | 129
    loss
                       | 18790
    n_updates
    policy_gradient_loss | -0.00292
    value loss | 469
| rollout/
```

```
ep len mean
                      | 1.19e+03
   ep_rew_mean
                      | 2.05e+03
time/
                      | 120
  fps
   iterations
                      1881
                     | 7991
   time_elapsed
   total timesteps
                     | 963072
train/
                      | 0.00061483786
   approx kl
                     | 0.000195
   clip_fraction
                     | 0.2
   clip range
                      | -0.465
   entropy_loss
   explained variance | 0.879
   learning_rate
                     | 1e-06
                      44.7
                      18800
   n_updates
   policy gradient loss | -0.000713
   value_loss | 179
rollout/
                      | 1.2e+03
   ep_len_mean
   ep_rew_mean
                    | 2.05e+03
time/
                      | 120
                     | 1882
   iterations
   time_elapsed
                    7995
963584
   total_timesteps
train/
                      0 0053789294
   approx_kl
                     0.027
0.2
   clip fraction
   clip range
   entropy_loss
                     | -0.585
   explained_variance | 0.862
   learning_rate | 1e-06
                     59.1
   loss
                    i 18810
   n updates
   policy_gradient_loss | -0.00764
   value_loss | 166
rollout/
                   | 1.2e+03
| 2.05e+03
   ep len mean
  ep_rew_mean
time/
  fps
                      120
                      | 1883
   iterations
                    | 7999
| 964096
   time elapsed
   total_timesteps
train/
                      | 0.0015007834
   approx_kl
                     0.00137
   clip_fraction
   clip_range
                     | 0.2
   entropy_loss | -0.659
explained_variance | 0.939
                      le-06
   learning_rate
                      | 63.9
   loss
                      | 18820
   n updates
   policy_gradient_loss | -0.00135
   value loss
rollout/
   ep_len_mean
                     1.2e+03
                    2.05e+03
   ep rew mean
time/
                      | 120
  fps
   iterations
                      | 1884
                     | 8003
   time_elapsed
   total_timesteps
                     | 964608
train/
   approx kl
                      0.0032247042
                    | 0.0234
   clip_fraction
                     | 0.2
   clip range
                      | -0.542
   entropy_loss
   explained variance | 0.891
                      | 1e-06
   learning_rate
                      | 62.3
   loss
   n updates
                      | 18830
   policy_gradient_loss | -0.003
   value_loss
                      | 156
```

```
rollout/
                        1.2e+03
   ep len mean
   ep rew mean
                       2.05e+03
time/
                       1 120
  fps
                        1885
   iterations
   time elapsed
                        8008
   total timesteps
                       | 965120
                       | 0.0036727374
   approx_kl
   clip_fraction
                      0.0102
   clip_range
                       0.2
   entropy loss
                       | -0.755
   explained variance | 0.889
   learning rate
                      l 1e-06
   loss
                       1 90.9
                       | 18840
   n updates
   policy_gradient_loss | -0.00406
   value loss | 235
rollout/
  ep_len_mean
ep_rew_mean
                      | 1.19e+03
                       | 2.03e+03
time/
                      | 120
  fps
                      | 1886
   iterations
   time_elapsed
                      | 8012
  total_timesteps
                       965632
train/
                     0.0011322938
0.00137
   approx kl
   clip_fraction
   clip range
                     0.2
   entropy_loss | -0.54
explained_variance | 0.941
                       l 1e-06
   learning_rate
   loss
                       | 25
                      18850
   n updates
   policy_gradient_loss | -0.00168
   value loss
                       | 147
rollout/
                       | 1.18e+03
   ep len mean
   ep rew mean
                       | 2.01e+03
time/
                      | 120
  fps
   iterations
   time_elapsed
                     | 8016
  total_timesteps
                      | 966144
train/
  approx kl
                      0.0017094283
                      | 0.0102
   clip_fraction
  clip_range
entropy_loss
                      0.2
                      | -0.476
   explained variance | 0.373
                       | 1e-06
   learning_rate
   loss
                       | 18860
   n_updates
   policy_gradient_loss | -0.00317
   value_loss
                      | 1.18e+03
   ep_len_mean
   ep_rew_mean
                       2.01e+03
time/
                        1888
   iterations
   time elapsed
                        8020
   total_timesteps
                      966656
                       0.0040747263
   approx_kl
   clip fraction
                      0.0494
   clip_range
                       0.2
   entropy loss
                       | -0.587
   explained_variance
                      0.639
   learning_rate
                       | 1e-06
                       | 314
   n updates
                       | 18870
   policy_gradient_loss | -0.00111
   value loss | 752
```

```
rollout/
  ep len mean
                    1.18e+03
  ep_rew_mean
                    2.01e+03
time/
                     | 120
  fps
  iterations
                      1889
  time_elapsed
                    8025
  total_timesteps
                   967168
train/
                    0.0026621954
  approx kl
                    0.00586
  clip_fraction
                    0.2
  clip range
                    | -0.763
  entropy_loss
  explained variance | 0.866
  learning_rate
                     i 1e-06
  loss
                     51.3
                     | 18880
  n updates
  policy_gradient_loss | -0.00205
  value_loss | 173
rollout/
                     | 1.18e+03
  ep_len_mean
  ep_rew_mean
                   | 2.01e+03
time/
                    | 120
  fps
                    | 1890
  iterations
  time elapsed
                   8029
  total_timesteps
                   967680
                    0.0054145427
  approx kl
  clip fraction
                    0.0314
```

policy_gradient_loss | -0.00549

explained_variance | 0.827

clip_range

entropy loss

loss

n_updates

learning_rate

value_loss

0.2

| -0.764

l 1e-06

33.3

| 18890

| 261

1.19e+03
2.03e+03
120
1891
8033
968192
0.0021510506
0.00703
0.2
-0.812
0.766
1e-06
88.1
18900
0.00223
307

.....

		•
rollout/	i I	
ep_len_mean	1.19e+03	
ep_rew_mean	2.03e+03	
time/		
fps	120	
iterations	1892	
time_elapsed	8037	
total_timesteps	968704	
train/	l I	
approx_kl	0.001650049	
clip_fraction	0.0041	
clip_range	0.2	
entropy_loss	-0.896	
<pre> explained_variance </pre>	0.539	
learning_rate	1e-06	
loss	336	
n_updates	18910	
<pre>policy_gradient_loss </pre>	-0.00261	
value loss	804	

rollout/ ep_len_mean | 1.19e+03 ep_rew_mean | 2.03e+03 time/ fps | 120 | 1893 iterations time elapsed 8042 total_timesteps | 969216 train/ | 0.0061146906 approx_kl clip_fraction 0.0475 clip_range
entropy_loss | 0.2 entropy_loss | -0.654 explained_variance | 0.926 | 1e-06 learning rate | 52 loss n updates 18920 policy_gradient_loss | -0.00551 value_loss | 121 ep_len_mean ep_rew_mean | 1.19e+03 | 2.03e+03 time/ | 120 fps iterations | 1894 | 8046 | 969728 time_elapsed total timesteps train/ 0.0008658592 approx_kl 0.000977 clip_fraction 0.2 clip_range entropy_loss | -0 654 explained variance | 0.904 learning_rate | 1e-06 loss | 78.3 n_updates | 18930 policy_gradient_loss | -0.00122 value_loss | 184 ep_len_mean | 1.19e+03 ep_rew_mean | 2.04e+03 time/ | 120 fps | 1895 iterations time_elapsed | 8051 total_timesteps 970240 0.0040677767 0.0213 0.2 approx kl clip_fraction clip range | -0.689 entropy_loss explained_variance | 0.906 learning_rate | 1e-06 loss | 62.5 | 18940 n_updates

rollout/ | 1.19e+03 ep_len_mean ep_rew_mean | 2.04e+03 time/ | 120 fps | 1896 iterations time elapsed | 8055 | 970752 total_timesteps train/ approx kl 0.006271193 clip fraction 0.0604 clip_range
entropy_loss 0.2 | -0.72 explained_variance | 0.492 | 1e-06 learning_rate loss | 592 | 18950 n updates policy_gradient_loss | -0.00622

policy gradient loss | -0.00608

| 153

value loss

value_loss	984
rollout/	
ep_len_mean	
ep_ten_mean	1.2e+03 2.04e+03
time/	2.046.05
fps	120
iterations	1897
time_elapsed	8059
total_timesteps	971264
train/	
approx_kl	0.0060571525
clip_fraction	0.0217
clip_range	0.2 -0.911
<pre> entropy_loss explained variance</pre>	-0.911 0.955
learning_rate	1e-06
l loss	31.5
n updates	18960
. = .	-0.005
value loss	94.6
rollout/	
ep_len_mean	1.2e+03
ep_rew_mean	2.04e+03
time/ fps	
iterations	120 1898
time elapsed	8064
total timesteps	971776
train/	i i
approx_kl	0.002395424
clip_fraction	0.0133
clip_range	0.2
entropy_loss	-0.996
explained_variance	0.862
learning_rate	1e-06
loss n updates	245 18970
	-0.00189
value loss	459
rollout/	
ep_len_mean	1.2e+03
ep_rew_mean	2.04e+03
time/	
fps iterations	120 1899
time elapsed	8068
total timesteps	972288
train/	
approx kl	0.0018598002
clip_fraction	0.000195
clip_range	0.2
entropy_loss	-0.897
explained_variance	0.907
learning_rate	1e-06
loss	91.7
n_updates	18980
<pre>policy_gradient_loss value loss</pre>	-0.000526 215
vatue_t055	
rollout/	
ep_len_mean	1.2e+03
ep_rew_mean	2.04e+03
time/	
fps	120
iterations time_elansed	1900 8072

time_elapsed total_timesteps

approx_kt
clip_fraction
clip_range
entropy_loss
explained_variance
learning_rate

approx_kl

loss

n_updates

| train/

8072 972800

0.008294107

0.0387 0.2 -1.09 0.79 1e-06

269

| 18990

policy_gradient_loss value_loss	-0.00397 588
rollout/	
ep_len_mean	1.2e+03
ep_rew_mean	2.03e+03
time/	
fps iterations	120
time_elapsed	1901 8076
total timesteps	973312
train/	975512
approx kl	0.00391806
clip_fraction	0.00391
clip range	0.2
entropy_loss	-0.953
<pre> explained_variance</pre>	0.927
learning_rate	1e-06
loss	48.5
n_updates	19000
. , ,	-0.00213
value_loss	183
rollout/	
ep len mean	 1.2e+03
ep rew mean	2.03e+03
time/	
fps	120
iterations	1902
time_elapsed	8081
<pre>total_timesteps</pre>	973824
train/	
approx_kl	0.0069869803
clip_fraction	0.0568
clip_range	0.2
entropy_loss	-0.816
<pre> explained_variance learning rate</pre>	0.687 1e-06
loss	16-00 691
n updates	19010
policy_gradient_loss	-0.00352
value loss	796
·	
rollout/	
ep_len_mean	1.2e+03
ep_rew_mean	2.03e+03
time/	
fps iterations	120
time elapsed	1903 8085
total timesteps	974336
train/	374330
approx kl	
clip fraction	0.0113
clip range	0.2
entropy_loss	-0.978
<pre> explained_variance</pre>	0.88
learning_rate	1e-06
loss	38.1
n_updates	19020
policy_gradient_loss	-0.00461
value_loss	208
1 1 1	

rollout/

train/

ep_len_mean
ep_rew_mean
time/

iterations time_elapsed total_timesteps

ann/
approx_kl
clip_fraction
clip_range
entropy_loss
explained_variance

learning_rate

loss

1.2e+03

2.02e+03

0.007035019 0.0225 0.2 -1.09 0.755

120 1904

8089 974848

1e-06

26.4

n_updates policy_gradient_loss value_loss	19030 -0.0022 93.9
rollout/	
! ' !	1.2e+03
ep_rew_mean	2.02e+03
time/ fps	
iterations	1905 I
time elapsed	8093
total timesteps	975360
train/	İ
approx_kl	0.0015663
• • •	0.000586
<pre> clip_range entropy loss</pre>	0.2 -0.891
	0.865
learning rate	1e-06
loss	129
n_updates	19040
1 , , , , , , ,	-0.00156
value_loss	269
rollout/	1
ep_len_mean	1.2e+03
ep_rew_mean	2.03e+03
time/	
fps	120
iterations time elapsed	1906 8097
total timesteps	975872
train/	i
approx_kl	0.0036754047
· ' - '	0.0146
clip_range entropy_loss	0.2 -0.81
	0.92
learning_rate	1e-06
loss	66.7
n_updates	19050
<pre>policy_gradient_loss value loss</pre>	-0.00316 162
rollout/	
<pre> ep_len_mean ep rew mean</pre>	1.2e+03 2.03e+03
time/	2.036103
fps	120
iterations	1907
time_elapsed	8102
<pre> total_timesteps train/</pre>	976384
approx kl	 0.008781405
clip_fraction	0.0662
_ : _ : _ : _ : _ : _ : _ : _ : _ : _ :	0.2
entropy_loss	-0.967
·	0.898 1e-06
1 1055	113
loss n updates	113 19060
n_updates	-
n_updates policy_gradient_loss	19060
n_updates policy_gradient_loss	19060 -0.00921
n_updates policy_gradient_loss value_loss	19060 -0.00921
n_updates policy_gradient_loss	19060 -0.00921
n_updates policy_gradient_loss value_loss rollout/	19060 -0.00921 341
n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/	19060 -0.00921 341
n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps	19060 -0.00921 341
n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations	19060 -0.00921 341
n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed	19060 -0.00921 341
n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations	19060 -0.00921 341
n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps	19060 -0.00921 341
n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction	19060 -0.00921 341
n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range	19060 -0.00921 341
n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss	19060 -0.00921 341 1.2e+03 2.02e+03 1908 8106 976896 0.002604959 0.0242 0.2 -0.773
n_updates policy_gradient_loss value_loss rollout/ ep_len_mean ep_rew_mean time/ fps iterations time_elapsed total_timesteps train/ approx_kl clip_fraction clip_range entropy_loss	19060 -0.00921 341

```
loss
                      | 61.3
                      | 19070
   n_updates
   policy_gradient_loss | -0.00324
   value loss | 130
rollout/
   ep_len_mean
                       1.2e+03
  ep_rew_mean
                      | 2.02e+03
time/
  fps
                      | 120
                      | 1909
  iterations
  time elapsed
                     | 8110
  total_timesteps
                     | 977408
train/
                      0.0006612224
  approx kl
  clip fraction
                      0.00117
                     0.2
   clip_range
   entropy_loss
                      | -0.543
   explained_variance | 0.558
                      | 1e-06
   learning_rate
                      | 86.3
   loss
                      | 19080
   n updates
   policy_gradient_loss | -0.000235
   value loss
rollout/
                      | 1.2e+03
  ep len mean
                     | 2.02e+03
  ep_rew_mean
time/
                      | 120
  fps
                     | 1910
  iterations
                    | 8114
  time elapsed
   total timesteps
                      977920
train/
  approx kl
                      | 0.0016329101
                     | 0.000781
   clip_fraction
  clip_range
entropy_loss
                      0.2
                     | -0.673
   explained_variance | 0.878
                    | 1e-06
   learning_rate
                      | 32.3
                      | 19090
   n_updates
   policy_gradient_loss | -0.00244
   value_loss | 122
                    | 1.2e+03
  ep len mean
  ep_rew_mean
                      | 2.02e+03
time/
  fps
                      | 120
                      | 1911
   iterations
   time_elapsed
                      | 8119
                     978432
  total_timesteps
train/
                      | 0.0051534623
  approx kl
   clip_fraction
                      0.0309
                     0.2
   clip_range
                     | -0.747
   entropy_loss
   explained variance | 0.824
                      | 1e-06
   learning_rate
   loss
   n updates
                      | 19100
   policy_gradient_loss | -0.00165
   value_loss
                      | 189
rollout/
  ep_len_mean
                      | 1.2e+03
                      | 2.02e+03
  ep_rew_mean
time/
                      120
  fps
                      | 1912
   iterations
   time_elapsed
                      8123
                      | 978944
  total_timesteps
train/
                      0.0034708267
   approx_kl
   clip_fraction
                      0.0166
                      0.2
   clip_range
   entropy loss
                      | -0.586
   explained_variance
                     | 0.891
```

learning_rate loss n_updates policy_gradient_loss value_loss	1e-06 110 19110 -0.00337 280
rollout/	
ep_len_mean	1.2e+03
ep_rew_mean	2.02e+03
time/	
fps	120
iterations time elapsed	1913 8127
total timesteps	0127 979456
train/	373430
approx kl	0.0018144398
clip_fraction	0.00313
clip_range	0.2
entropy_loss	-0.538
explained_variance	0.886 1e-06
<pre> learning_rate loss</pre>	49.2
n updates	19120
. = .	-0.00206
value_loss	144
L mallout /	
rollout/ ep len mean	
ep_rew_mean	2.03e+03
time/	
fps	120
iterations	1914
time_elapsed	8131
total_timesteps	979968
train/ approx kl	 0.00051161926
clip_fraction	0.00031101320
clip_range	0.2
entropy_loss	-0.571
<pre> explained_variance </pre>	0.803
learning_rate	1e-06
loss	94.2
<pre> n_updates policy_gradient_loss </pre>	19130 0.000833
value_loss	192
rollout/	
<pre> ep_len_mean ep rew mean</pre>	1.21e+03 2.03e+03
ep_rew_mean time/	2.036+03
fps	120
iterations	1915
time_elapsed	8136
total_timesteps	980480
train/ approx kl	 0.0028195847
clip_fraction	0.0028193847 0.0404
clip_range	0.2
entropy_loss	-0.58
explained_variance	0.648
learning_rate	1e-06
loss	122
<pre> n_updates policy_gradient_loss </pre>	19140
value loss	801
rollout/	
ep_len_mean	1.21e+03
ep_rew_mean time/	2.03e+03
fps	
iterations	1916
time_elapsed	8141
total_timesteps	980992
train/	
approx_kl clip_fraction	0.0010159469 0.000586
<pre> clip_fraction clip range</pre>	0.000586
entropy loss	-0.61
· '	,

learning_rate loss n_updates policy_gradient_loss value_loss	0.788 1e-06 73.4 19150 -0.000292 151
rollout/ ep_len_mean ep_rew_mean	1.21e+03 2.03e+03
<pre> time/</pre>	120 1917 8145 981504
approx_kl clip_fraction clip_range entropy_loss	0.0017698309 0.00137 0.2 -0.522 0.725
learning_rate loss n_updates policy_gradient_loss	1e-06 53.8 19160 -0.00106
value_loss	159
rollout/ ep_len_mean ep_rew_mean time/	1.21e+03 2.03e+03
fps iterations time_elapsed total_timesteps train/	120 1918 8149 982016
approx_kl clip_fraction clip_range entropy_loss	0.0010355049 0.000195 0.2 -0.633
<pre> explained_variance learning_rate loss n_updates policy_gradient_loss </pre>	0.916 1e-06 126 19170 0.000114
value_loss	236
rollout/ ep_len_mean ep_rew_mean time/	1.21e+03 2.03e+03
fps iterations time_elapsed total_timesteps	120 1919 8153 982528
train/ approx_kl clip_fraction clip_range entropy_loss	0.0047570113 0.0564 0.2 -0.588
learning_rate loss n_updates	0.729 1e-06 126 19180 -0.00866
	314
rollout/ ep_len_mean ep_rew_mean	1.21e+03 2.03e+03
time/ fps iterations time_elapsed total_timesteps	120 1920 8158 983040
train/ approx_kl clip_fraction clip_range	0.005302023 0.0238 0.2

=11.11	-0.697 0.835 1e-06 395 19190 -0.00318
rollout/	I I
ep_len_mean	1.21e+03
ep_rew_mean	2.03e+03
time/	
fps iterations	120 1921
time elapsed	8162
total_timesteps	983552
train/	
approx_kl	0.005832718
<pre> clip_fraction clip range</pre>	0.0258 0.2
entropy_loss	-0.709
explained_variance	0.928
learning_rate	1e-06
loss	44.4
<pre> n_updates policy_gradient_loss</pre>	19200 -0.00207
value_loss	143
rollout/	
<pre> ep_len_mean ep rew mean</pre>	1.21e+03 2.03e+03
time/	
fps	120
iterations	1922
time_elapsed	8166
<pre> total_timesteps train/</pre>	984064
approx kl	0.003004218
clip_fraction	0.00645
clip_range	0.2
entropy_loss	-0.471
<pre> explained_variance learning rate</pre>	0.925 1e-06
loss	87.7
n_updates	19210
policy_gradient_loss	
value_loss	151
rollout/	
ep_len_mean	1.22e+03
ep_rew_mean	2.04e+03
time/ fps	
iterations	1923
time_elapsed	8170
total_timesteps	984576
train/	
approx_kl clip_fraction	0.0010444705 0.00469
clip_range	0.2
entropy_loss	-0.281
explained_variance	0.845
<pre> learning_rate loss</pre>	1e-06 27.5
n updates	19220
	-0.000878
value_loss	123
rollout/	
ep_len_mean	1.21e+03
ep_rew_mean	2.03e+03
time/	
fps iterations	120
<pre> iterations time elapsed</pre>	1924 8174
total_timesteps	985088
train/	ı İ
approx_kl	0.0011788683
clip_fraction	0.0262

```
clip_range
   entropy_loss
                      | -0.329
   explained_variance | 0.659
   learning_rate
                      | 1e-06
   loss
                      | 93.9
                     | 19230
   n updates
   policy_gradient_loss | 0.00298
   value_loss | 691
rollout/
   ep_len_mean
                        1.21e+03
  ep_rew_mean
                      | 2.03e+03
time/
                      120
                      | 1925
   iterations
   time elapsed
                     8179
                     | 985600
  total timesteps
train/
  approx_kl
                      0.001513253
   clip_fraction
                     | 0.0119
  clip_range | 0.2
entropy_loss | -0.304
explained_variance | 0.313
   learning_rate
                     | 1e-06
                     | 742
   loss
   n updates
                      | 19240
   policy_gradient_loss | -0.00189
   value loss | 724
                      | 1.21e+03
   ep len mean
  ep_rew_mean
                      2.03e+03
time/
                      120
  fps
  iterations
                      | 1926
                    | 8183
| 986112
  time_elapsed
  total_timesteps
                      0.0008938144
  approx_kl
                     | 0.00273
  clip_fraction
                     | 0.2
   clip_range
                      | -0.366
   entropy_loss
   explained variance | 0.952
   learning_rate | 1e-06
                      | 26.7
   n updates
                      19250
   policy_gradient_loss | -0.00102
   value_loss | 77.7
  ep_len_mean
                    | 1.21e+03
| 2.03e+03
  ep_rew_mean
                      | 120
                    | 1927
| 8187
| 986624
  iterations
   time_elapsed
  total_timesteps
train/
                     0.00085034524
0.00391
0.2
  approx kl
   clip fraction
   clip_range
   entropy_loss
                     | -0.319
   explained_variance | 0.912
                      | 1e-06
   learning_rate
   loss
                      | 57.4
   n_updates
                      | 19260
   policy_gradient_loss | -0.00117
   value_loss | 145
rollout/
                      | 1.21e+03
  ep len mean
  ep_rew_mean
                      2.03e+03
time/
                      | 120
  iterations
                      | 1928
   time elapsed
                      | 987136
  total_timesteps
train/
                      0.0007574271
  approx_kl
```

```
clip_fraction
                      0.00508
                      | 0.2
   clip_range
   entropy_loss
                      | -0.381
   explained_variance | 0.795
   learning_rate
                      | 1e-06
                      | 43.6
                     | 19270
   n updates
   policy_gradient_loss | 7.57e-05
   value loss | 471
rollout/
  ep len mean
                      | 1.22e+03
                     | 2.03e+03
  ep_rew_mean
time/
                      | 120
  fps
  iterations
                      1929
                    | 8195
  time elapsed
   total timesteps
                      987648
train/
                      0.0009983688
  approx kl
   clip_fraction
                     | 0.00195
  clip_range
entropy_loss
                      0.2
                     -0.48
   explained variance | 0.874
                    | 1e-06
   learning_rate
                     | 95.4
                      | 19280
  n_updates
  policy_gradient_loss | -0.000234
   value_loss | 188
  ep_len_mean
                     | 1.22e+03
  ep_rew_mean
                      | 2.03e+03
time/
  fps
                      | 120
                      | 1930
  iterations
                     | 8200
| 988160
   time_elapsed
  total_timesteps
                      | 0.0030370257
  approx_kl
   clip fraction
                      | 0.0359
                     0.2
   clip range
   entropy loss
                     | -0.461
   explained variance | 0.732
   learning_rate
                      | 1e-06
  loss
                      548
                      | 19290
   n_updates
   policy_gradient_loss | 0.00641
                    | 634
   value_loss
rollout/
  ep_len_mean
                      | 1.22e+03
  ep rew mean
                      | 2.03e+03
time/
  fps
                      | 120
   iterations
                      | 1931
   time elapsed
                      | 8204
  total_timesteps
                      988672
train/
                      0.0013482067
   approx_kl
   clip fraction
                     0.0043
   clip_range
                     0.2
                      -0.529
   entropy_loss
   explained_variance | 0.903
   learning_rate
                      | 1e-06
                      | 26.7
   loss
                      | 19300
   n updates
   policy_gradient_loss | -0.00159
rollout/
  ep len mean
                      1.21e+03
                      | 2.03e+03
  ep_rew_mean
time/
                      | 120
                      | 1932
   iterations
                      | 8208
  time_elapsed
   total timesteps
                      | 989184
train/
```

policy_gradient_loss value_loss	0.0018800489 0.024 0.2 -0.522 0.637 1e-06 139 19310 0.00208
rollout/ ep_len_mean	 1.21e+03
ep_rew_mean	2.02e+03
time/ fps	
iterations	1933
<pre> time_elapsed total timesteps</pre>	8212 989696
train/	
approx_kl clip_fraction	0.0008049465 0.00527
clip_fraction clip_range	0.00327
entropy_loss	-0.428
<pre> explained_variance learning_rate</pre>	0.568 1e-06
loss	111
<pre> n_updates policy_gradient_loss</pre>	19320
value_loss	647
rollout/	
ep_len_mean	1.21e+03
ep_rew_mean time/	2.02e+03
fps	120
iterations	1934
<pre> time_elapsed total_timesteps</pre>	8217 990208
train/	j j
approx_kl clip_fraction	0.0036177305 0.0141
clip range	0.2
entropy_loss	-0.651
<pre> explained_variance learning rate</pre>	0.935 1e-06
loss	48.4
<pre> n_updates policy_gradient_loss</pre>	19330 -0 00367
	155
rollout/	
ep_len_mean	1.21e+03 2.02e+03
ep_rew_mean time/	2.02e+03
fps	120
iterations time elapsed	1935 8222
total_timesteps	990720
train/	
approx_kl clip_fraction	0.0014913310
clip_range	0.2
<pre> entropy_loss explained variance</pre>	-0.482 0.885
learning_rate	le-06
loss n updates	41.6 19340
	-0.00215
value_loss	106
rollout/	
ep_len_mean	1.21e+03 2.02e+03
ep_rew_mean time/	
fps	120
<pre> iterations time elapsed</pre>	1936 8226
total_timesteps	991232

```
train/
                      | 0.0010883211
   approx kl
   clip fraction
                      0.00566
                      0.2
   clip_range
                      | -0.352
   entropy_loss
   explained_variance | 0.841
   learning_rate | 1e-06
                      | 42.1
   n updates
                     | 19350
   policy_gradient_loss | -0.00166
   value_loss | 101
rollout/
   ep len mean
                      | 1.2e+03
                     2.02e+03
  ep_rew_mean
time/
                      | 120
  fps
   iterations
                      | 1937
  time_elapsed
                     8230
                     991744
  total_timesteps
train/
                      | 0.0023613698
  approx kl
   clip_fraction
                     | 0.0152
   clip range
                     | 0.2
  explained_variance | 0.706 | learning_rate
   learning_rate
                      | 64.5
   loss
                      | 19360
   n_updates
   policy gradient loss | 0.000182
   value_loss | 180
rollout/
                      | 1.2e+03
  ep_len_mean
  ep_rew_mean
                    2.02e+03
time/
                      | 120
                      | 1938
  iterations
   time_elapsed
                    | 8234
  total_timesteps
                     992256
train/
                      0.0025474303
  approx kl
   clip fraction
                     | 0.0119
  clip_range
entropy_loss
                    0.2
   explained variance | 0.869
                     | 1e-06
   learning_rate
   loss
                      | 35.2
   n_updates
                      | 19370
   policy_gradient_loss | -0.00331
   value loss
                      | 216
                    | 1.2e+03
  ep_len_mean
ep_rew_mean
                     | 2.02e+03
time/
  fps
                      | 120
                      | 1939
   iterations
  time_elapsed
                     | 8239
| 992768
  total timesteps
train/
                      | 0.00019601092
  approx_kl
                     | 0.00215
   clip_fraction
   clip_range
                      0.2
   entropy_loss
                      | -0.237
   explained_variance | 0.466
                     | 1e-06
   learning_rate
   loss
                      | 568
   n updates
                      | 19380
   policy_gradient_loss | 6.33e-05
   value loss
                      | 778
rollout/
  ep len mean
                      | 1.19e+03
  ep_rew_mean
                      | 2e+03
time/
                      | 120
  fps
   iterations
                      | 1940
                      | 8243
  time_elapsed
```

total_timesteps	993280
train/ approx kl	 0.00024336693
clip fraction	0.000195
clip_range	0.2
entropy_loss	-0.172
<pre> explained_variance</pre>	0.746
learning_rate	1e-06
loss	60.2 19390
<pre> n_updates policy_gradient_loss </pre>	19390
value loss	180
rollout/	
ep len mean	
ep rew mean	1.99e+03
time/	i i
fps	120
iterations	1941
<pre> time_elapsed total timesteps</pre>	8247 993792
totat_timesteps train/	993792
approx_kl	0.0009212339
clip_fraction	0.0082
clip_range	0.2
entropy_loss	-0.292
explained_variance	0.682
learning_rate	1e-06 225
loss n updates	225 19400
policy_gradient_loss	
value_loss	559
rollout/	
ep len mean	
ep rew mean	1.99e+03
time/	į į
fps	120
iterations	1942
time_elapsed	8251 994304
<pre> total_timesteps train/</pre>	994304
approx kl	0.0003205638
clip_fraction	0.00937
clip_range	0.2
entropy_loss	-0.235
<pre> explained_variance learning rate</pre>	0.541 1e-06
· · ·	376
•	19410
policy_gradient_loss	
value_loss	714
rollout/	
ep len mean	1.18e+03
ep_rew_mean	1.99e+03
time/	
fps	120
<pre> iterations time_elapsed</pre>	1943 8256
total timesteps	994816
train/	
approx_kl	0.0020016795
clip_fraction	0.0141
clip_range	0.2
· ! '.' !	-0.3 0.769
explained_variance learning rate	0.769 1e-06
loss	121
n updates	19420
policy_gradient_loss	
value_loss	292
rollout/	
ep_len_mean	1.18e+03
ep_rew_mean	
	1.99e+03
time/	i i
time/ fps iterations	1.99e+03

```
time elapsed
                      | 8260
                      995328
  total_timesteps
train/
                      0.0010724901
  approx kl
  clip fraction
                      0.00449
                      0.2
  clip_range
                     i -0.219
  entropy loss
  explained_variance | 0.544
                      le-06
  learning_rate
                      | 239
  loss
                      | 19430
  n updates
  policy_gradient_loss | -0.00157
  value loss
rollout/
  ep len mean
                     1.99e+03
  ep rew mean
time/
  fps
                      | 120
  iterations
                     | 1945
                    | 8264
  time_elapsed
  total_timesteps
                    995840
train/
  approx kl
                     0.0010807004
                     | 0.00371
  clip_fraction
  clip range
                     0.2
                     -0.219
  entropy_loss
  explained_variance | 0.477
                     | 1e-06
  learning_rate
                      | 47.6
                      19440
  n updates
  policy gradient loss | 0.000122
  value_loss | 223
                     | 1.18e+03
  ep_len_mean
  ep_rew_mean
                     | 1.99e+03
time/
                      | 120
                    | 1946
  iterations
                    | 8268
  time elapsed
  total_timesteps
                      996352
                      | 0.001091476
  approx kl
  clip_fraction
                     | 0.000977
  clip range
                     0.2
                     | -0.454
  entropy_loss
  explained_variance | 0.978
  learning_rate
                     | 1e-06
                      | 34.3
  loss
                      | 19450
  n updates
  policy_gradient_loss | -0.000951
  value_loss | 86.5
rollout/
                     | 1.18e+03
  ep_len_mean
  ep_rew_mean
                     | 1.99e+03
time/
                      120
  fps
                     | 1947
  iterations
  time elapsed
  total timesteps
                     996864
train/
                      0.0012640813
  approx_kl
  clip_fraction
                     0.00605
  clip_range
                      0.2
  entropy_loss
                     | -0.221
  explained_variance | 0.892
  learning_rate
                      | 1e-06
                      | 46.3
  loss
                      | 19460
  n updates
  policy gradient loss | -0.00372
  value loss
  ep len mean
                      | 1.19e+03
                      | 2e+03
  ep_rew_mean
time/
                      | 120
 fps
```

```
iterations
                       | 1948
   time_elapsed
                      | 8277
   total timesteps
                       997376
train/
                       | 0.00015526684
  approx kl
   clip_fraction
                      | 0.000391
  clip_range
entropy_loss
                      0.2
                      | -0.249
   explained variance | 0.863
   learning_rate
                      | 1e-06
                       | 82.9
   loss
                       | 19470
   n_updates
   policy_gradient_loss | -0.000649
                       | 216
   value_loss
  ep_len_mean
ep_rew_mean
                        1.19e+03
                      2e+03
time/
                       | 120
  fps
   iterations
                        1949
                     | 8281
| 997888
   time elapsed
   total_timesteps
                      0.0011523509
   approx kl
   clip fraction
                      0.0215
                      0.2
   clip_range
   entropy loss
                      -0.287
   explained_variance | 0.748
   learning_rate
                      | 1e-06
   loss
                       i 376
                       | 19480
   n_updates
   policy_gradient_loss | 0.00149
   value loss | 752
rollout/
   ep_len_mean
                      | 1.19e+03
  ep_rew_mean
                       | 2e+03
time/
  fps
                       | 120
                       | 1950
   iterations
                       | 8285
   time elapsed
   total timesteps
                       998400
train/
                      0.0004046259
   approx_kl
                     0.00156
   clip fraction
   clip_range
                      0.2
                      | -0.319
   entropy_loss
   explained_variance | 0.84
   learning_rate
                       | 1e-06
   loss
                       | 82.3
   n updates
                       | 19490
   policy_gradient_loss | -0.000781
   value loss
rollout/
                       | 1.19e+03
  ep len mean
   ep_rew_mean
                      | 2e+03
time/
                      | 120
  fps
   iterations
                      1951
                     | 8289
   time_elapsed
   total_timesteps
                       998912
train/
  approx kl
                       | 8.407945e-05
   clip_fraction
   clip range
                      0.2
   entropy_loss
                       | -0.269
   explained variance | 0.765
                       | 1e-06
   learning_rate
                        74.4
   n_updates
                       19500
   policy_gradient_loss | -0.00028
   value loss
                       | 157
                       | 1.19e+03
   ep_len_mean
   ep_rew_mean
                       | 2.01e+03
time/
```

```
fps
                                                                                                        | 120
              | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 
  train/
              approx_kl | 0.00028378866
clip_fraction | 0.00176
clip_range | 0.2
entropy_loss | -0.358
               explained_variance | 0.881
               learning_rate | 1e-06
loss | 73.3
n_updates | 19510
               policy_gradient_loss | -0.00139
             value_loss | 160
rollout/
             ep_len_mean | 1.19e+03
ep_rew_mean | 2.01e+03
           iterations | 120

iterations | 1953

time_elapsed | 8298

total_timesteps | 999936

ain/ |

approx_kl

clip_frace
time/
 train/
            all/
approx_kl | 0.0030658129
clip_fraction | 0.0275
clip_range | 0.2
entropy_loss | -0.453
explained_variance | 0.939
learning_rate | 1e-06
loss | 20.5
                                                                                                       | 19520
              n updates
              policy gradient loss | -0.00816
              value_loss | 127
             ep_len_mean | 1.2e+03
ep_rew_mean | 2.03e+03
me/
time/
          fps | 120
iterations | 1954
time_elapsed | 8303
total_timesteps | 1000448
'ain/
  train/
             approx_kl | 0.00012370851
clip_fraction | 0
clip_range | 0.2
entropy_loss | -0.227
              explained_variance | 0.879
               learning_rate | 1e-06
               loss | 62.6
n_updates | 19530
               policy_gradient_loss | -0.000607
               value_loss | 108
```

Out[13]: <stable_baselines3.ppo.ppo.PPO at 0x298ab5c65e0>

```
In [14]: model.save('PPOTestmodel')
```

C:\ProgramData\Anaconda3\lib\site-packages\ipykernel\ipkernel.py:287: DeprecationWarning: `should_run_async` will
not call `transform_cell` automatically in the future. Please pass the result to `transformed_cell` argument and
any exception that happen during thetransform in `preprocessing_exc_tuple` in IPython 7.17 and above.
 and should_run_async(code)

Testing and Loading the Model

```
In [15]: # Loading the model
  model = PPO.load('./training/best_model_1000000')
```

In []: