```python
from google.colab import drive
drive.mount('/content/drive')
```

```
Mounted at /content/drive
```

```python
cd drive/MyDrive/tok2vec
```

```
/content/drive/MyDrive/tok2vec
```

```python
pip install https://huggingface.co/opennyaiorg/en_legal_ner_trf/resolve/main/en_legal_ner_trf-any-py3-none-any.whl
```

```
Requirement already satisfied: spacy-legacy<3.1.0,>=3.0.8 in /usr/local/lib/python3.8/dist-packages (from spacy<3.3.0,>=3.2.2->en-legal-ner-trf==any) (3.0.10)
Requirement already satisfied: setuptools in /usr/local/lib/python3.8/dist-packages (from spacy<3.3.0,>=3.2.2->en-legal-ner-trf==any) (57.4.0)
Requirement already satisfied: catalogue<2.1.0,>=2.0.6 in /usr/local/lib/python3.8/dist-packages (from spacy<3.3.0,>=3.2.2->en-legal-ner-trf==any) (2.0.8)
Requirement already satisfied: tqdm<5.0.0,>=4.38.0 in /usr/local/lib/python3.8/dist-packages (from spacy<3.3.0,>=3.2.2->en-legal-ner-trf==any) (4.64.1)
Requirement already satisfied: preshed<3.1.0,>=3.0.2 in /usr/local/lib/python3.8/dist-packages (from spacy<3.3.0,>=3.2.2->en-legal-ner-trf==any) (3.0.8)
Requirement already satisfied: langcodes<4.0.0,>=3.2.0 in /usr/local/lib/python3.8/dist-packages (from spacy<3.3.0,>=3.2.2->en-legal-ner-trf==any) (3.3.0)
Collecting typer<0.5,>=0.3.0
  Downloading typer-0.4.2-py3-none-any.whl (27 kB)
Requirement already satisfied: pyparsing!=3.0.5,>=2.0.2 in /usr/local/lib/python3.8/dist-packages (from packaging>=20.0->spacy<3.3.0,>=3.2.2->en-legal-ner-trf==any) (3.0.9)
Requirement already satisfied: smart-open<6.0.0,>=5.2.1 in /usr/local/lib/python3.8/dist-packages (from pathy>=0.3.5->spacy<3.3.0,>=3.2.2->en-legal-ner-trf==any) (5.2.1)
Requirement already satisfied: typing-extensions>=3.7.4.3 in /usr/local/lib/python3.8/dist-packages (from pydantic!=1.8,!=1.8.1,<1.9.0,>=1.7.4->spacy<3.3.0,>=3.2.2->en-legal-ner-trf==any) (4.4
Requirement already satisfied: idna<3,>=2.5 in /usr/local/lib/python3.8/dist-packages (from requests<3.0.0,>=2.13.0->spacy<3.3.0,>=3.2.2->en-legal-ner-trf==any) (2.10)
Requirement already satisfied: chardet<4,>=3.0.2 in /usr/local/lib/python3.8/dist-packages (from requests<3.0.0,>=2.13.0->spacy<3.3.0,>=3.2.2->en-legal-ner-trf==any) (3.0.4)
Requirement already satisfied: urllib3!=1.25.0,!=1.25.1,<1.26,>=1.21.1 in /usr/local/lib/python3.8/dist-packages (from requests<3.0.0,>=2.13.0->spacy<3.3.0,>=3.2.2->en-legal-ner-trf==any) (1.2
Requirement already satisfied: certifi>=2017.4.17 in /usr/local/lib/python3.8/dist-packages (from requests<3.0.0,>=2.13.0->spacy<3.3.0,>=3.2.2->en-legal-ner-trf==any) (2022.9.24)
Collecting transformers<4.22.0,>=3.4.0
  Downloading transformers-4.21.3-py3-none-any.whl (4.7 MB)
     |████████████████████████████████| 4.7 MB 79.2 MB/s
Requirement already satisfied: torch>=1.6.0 in /usr/local/lib/python3.8/dist-packages (from spacy-transformers<1.2.0,>=1.1.4->en-legal-ner-trf==any) (1.13.0+cu116)
Collecting spacy-alignments<1.0.0,>=0.7.2
  Downloading spacy_alignments-0.8.6-cp38-cp38-manylinux_2_17_x86_64.manylinux2014_x86_64.whl (1.1 MB)
     |████████████████████████████████| 1.1 MB 80.1 MB/s
Collecting spacy-transformers<1.2.0,>=1.1.4
  Downloading spacy_transformers-1.1.7-py2.py3-none-any.whl (53 kB)
     |████████████████████████████████| 53 kB 2.4 MB/s
Collecting transformers<4.21.0,>=3.4.0
  Downloading transformers-4.20.1-py3-none-any.whl (4.4 MB)
     |████████████████████████████████| 4.4 MB 84.4 MB/s
Collecting ████████3,<0.13,>=0.11.1
     |████████████████████████████████| 2.1-cp38-cp38-manylinux_2_12_x86_64.manylinux2010_x86_64.whl (6.6 MB)
     |████████████████████████████████| 6.6 MB 59.9 MB/s
Requirement already satisfied: filelock in /usr/local/lib/python3.8/dist-packages (from transformers<4.21.0,>=3.4.0->spacy-transformers<1.2.0,>=1.1.4->en-legal-ner-trf==any) (3.8.0)
Requirement already satisfied: regex!=2019.12.17 in /usr/local/lib/python3.8/dist-packages (from transformers<4.21.0,>=3.4.0->spacy-transformers<1.2.0,>=1.1.4->en-legal-ner-trf==any) (2022.6.2
Requirement already satisfied: pyyaml>=5.1 in /usr/local/lib/python3.8/dist-packages (from transformers<4.21.0,>=3.4.0->spacy-transformers<1.2.0,>=1.1.4->en-legal-ner-trf==any) (6.0)
Collecting huggingface-hub<1.0,>=0.1.0
  Downloading huggingface_hub-0.11.1-py3-none-any.whl (182 kB)
     |████████████████████████████████| 182 kB 80.1 MB/s
Requirement already satisfied: MarkupSafe>=0.23 in /usr/local/lib/python3.8/dist-packages (from jinja2->spacy<3.3.0,>=3.2.2->en-legal-ner-trf==any) (2.0.1)
Installing collected packages: typer, pydantic, tokenizers, thinc, huggingface-hub, transformers, spacy-alignments, spacy, spacy-transformers, en-legal-ner-trf
  Attempting uninstall: typer
    Found existing installation: typer 0.7.0
    Uninstalling typer-0.7.0:
      Successfully uninstalled typer-0.7.0
  Attempting uninstall: pydantic
    Found existing installation: pydantic 1.10.2
    Uninstalling pydantic-1.10.2:
      Successfully uninstalled pydantic-1.10.2
  Attempting uninstall: thinc
    Found existing installation: thinc 8.1.5
    Uninstalling thinc-8.1.5:
      Successfully uninstalled thinc-8.1.5
  Attempting uninstall: spacy
    Found existing installation: spacy 3.4.3
    Uninstalling spacy-3.4.3:
      Successfully uninstalled spacy-3.4.3
ERROR: pip's dependency resolver does not currently take into account all the packages that are installed. This behaviour is the source of the following dependency conflicts.
en-core-web-sm 3.4.1 requires spacy<3.5.0,>=3.4.0, but you have spacy 3.2.4 which is incompatible.
Successfully installed en-legal-ner-trf-3.2.0 huggingface-hub-0.11.1 pydantic-1.8.2 spacy-3.2.4 spacy-alignments-0.8.6 spacy-transformers-1.1.7 thinc-8.0.17 tokenizers-0.12.1 transformers-4.20
```

```python
pip install https://github.com/explosion/spacy-models/releases/download/en_core_web_sm-3.2.0/en_core_web_sm-3.2.0-py3-none-any.whl
```

```
Looking in indexes: https://pypi.org/simple, https://us-python.pkg.dev/colab-wheels/public/simple/
Collecting en-core-web-sm==3.2.0
  Downloading https://github.com/explosion/spacy-models/releases/download/en_core_web_sm-3.2.0/en_core_web_sm-3.2.0-py3-none-any.whl (13.9 MB)
     |████████████████████████████████| 13.9 MB 1.3 MB/s
Requirement already satisfied: spacy<3.3.0,>=3.2.0 in /usr/local/lib/python3.8/dist-packages (from en-core-web-sm==3.2.0) (3.2.4)
Requirement already satisfied: numpy>=1.15.0 in /usr/local/lib/python3.8/dist-packages (from spacy<3.3.0,>=3.2.0->en-core-web-sm==3.2.0) (1.21.6)
Requirement already satisfied: setuptools in /usr/local/lib/python3.8/dist-packages (from spacy<3.3.0,>=3.2.0->en-core-web-sm==3.2.0) (57.4.0)
Requirement already satisfied: blis<0.8.0,>=0.4.0 in /usr/local/lib/python3.8/dist-packages (from spacy<3.3.0,>=3.2.0->en-core-web-sm==3.2.0) (0.7.9)
Requirement already satisfied: preshed<3.1.0,>=3.0.2 in /usr/local/lib/python3.8/dist-packages (from spacy<3.3.0,>=3.2.0->en-core-web-sm==3.2.0) (3.0.8)
Requirement already satisfied: wasabi<1.1.0,>=0.8.1 in /usr/local/lib/python3.8/dist-packages (from spacy<3.3.0,>=3.2.0->en-core-web-sm==3.2.0) (0.10.1)
Requirement already satisfied: packaging>=20.0 in /usr/local/lib/python3.8/dist-packages (from spacy<3.3.0,>=3.2.0->en-core-web-sm==3.2.0) (21.3)
Requirement already satisfied: jinja2 in /usr/local/lib/python3.8/dist-packages (from spacy<3.3.0,>=3.2.0->en-core-web-sm==3.2.0) (2.11.3)
Requirement already satisfied: tqdm<5.0.0,>=4.38.0 in /usr/local/lib/python3.8/dist-packages (from spacy<3.3.0,>=3.2.0->en-core-web-sm==3.2.0) (4.64.1)
Requirement already satisfied: pathy>=0.3.5 in /usr/local/lib/python3.8/dist-packages (from spacy<3.3.0,>=3.2.0->en-core-web-sm==3.2.0) (0.10.0)
Requirement already satisfied: spacy-legacy<3.1.0,>=3.0.8 in /usr/local/lib/python3.8/dist-packages (from spacy<3.3.0,>=3.2.0->en-core-web-sm==3.2.0) (3.0.10)
Requirement already satisfied: typer<0.5.0,>=0.3.0 in /usr/local/lib/python3.8/dist-packages (from spacy<3.3.0,>=3.2.0->en-core-web-sm==3.2.0) (0.4.2)
Requirement already satisfied: langcodes<4.0.0,>=3.2.0 in /usr/local/lib/python3.8/dist-packages (from spacy<3.3.0,>=3.2.0->en-core-web-sm==3.2.0) (3.3.0)
Requirement already satisfied: requests<3.0.0,>=2.13.0 in /usr/local/lib/python3.8/dist-packages (from spacy<3.3.0,>=3.2.0->en-core-web-sm==3.2.0) (2.23.0)
Requirement already satisfied: murmurhash<1.1.0,>=0.28.0 in /usr/local/lib/python3.8/dist-packages (from spacy<3.3.0,>=3.2.0->en-core-web-sm==3.2.0) (1.0.9)
Requirement already satisfied: click<8.1.0 in /usr/local/lib/python3.8/dist-packages (from spacy<3.3.0,>=3.2.0->en-core-web-sm==3.2.0) (7.1.2)
Requirement already satisfied: catalogue<2.1.0,>=2.0.6 in /usr/local/lib/python3.8/dist-packages (from spacy<3.3.0,>=3.2.0->en-core-web-sm==3.2.0) (2.0.8)
Requirement already satisfied: spacy-loggers<2.0.0,>=1.0.0 in /usr/local/lib/python3.8/dist-packages (from spacy<3.3.0,>=3.2.0->en-core-web-sm==3.2.0) (1.0.3)
Requirement already satisfied: thinc<8.1.0,>=8.0.12 in /usr/local/lib/python3.8/dist-packages (from spacy<3.3.0,>=3.2.0->en-core-web-sm==3.2.0) (8.0.17)
Requirement already satisfied: pydantic!=1.8,!=1.8.1,<1.9.0,>=1.7.4 in /usr/local/lib/python3.8/dist-packages (from spacy<3.3.0,>=3.2.0->en-core-web-sm==3.2.0) (1.8.2)
Requirement already satisfied: cymem<2.1.0,>=2.0.2 in /usr/local/lib/python3.8/dist-packages (from spacy<3.3.0,>=3.2.0->en-core-web-sm==3.2.0) (2.0.7)
Requirement already satisfied: srsly<3.0.0,>=2.4.1 in /usr/local/lib/python3.8/dist-packages (from spacy<3.3.0,>=3.2.0->en-core-web-sm==3.2.0) (2.4.5)
Requirement already satisfied: pyparsing!=3.0.5,>=2.0.2 in /usr/local/lib/python3.8/dist-packages (from packaging>=20.0->spacy<3.3.0,>=3.2.0->en-core-web-sm==3.2.0) (3.0.9)
Requirement already satisfied: smart-open<6.0.0,>=5.2.1 in /usr/local/lib/python3.8/dist-packages (from pathy>=0.3.5->spacy<3.3.0,>=3.2.0->en-core-web-sm==3.2.0) (5.2.1)
Requirement already satisfied: typing-extensions>=3.7.4.3 in /usr/local/lib/python3.8/dist-packages (from pydantic!=1.8,!=1.8.1,<1.9.0,>=1.7.4->spacy<3.3.0,>=3.2.0->en-core-web-sm==3.2.0) (4.4
Requirement already satisfied: certifi>=2017.4.17 in /usr/local/lib/python3.8/dist-packages (from requests<3.0.0,>=2.13.0->spacy<3.3.0,>=3.2.0->en-core-web-sm==3.2.0) (2022.9.24)
Requirement already satisfied: chardet<4,>=3.0.2 in /usr/local/lib/python3.8/dist-packages (from requests<3.0.0,>=2.13.0->spacy<3.3.0,>=3.2.0->en-core-web-sm==3.2.0) (3.0.4)
Requirement already satisfied: idna<3,>=2.5 in /usr/local/lib/python3.8/dist-packages (from requests<3.0.0,>=2.13.0->spacy<3.3.0,>=3.2.0->en-core-web-sm==3.2.0) (2.10)
Requirement already satisfied: urllib3!=1.25.0,!=1.25.1,<1.26,>=1.21.1 in /usr/local/lib/python3.8/dist-packages (from requests<3.0.0,>=2.13.0->spacy<3.3.0,>=3.2.0->en-core-web-sm==3.2.0) (1.2
Requirement already satisfied: MarkupSafe>=0.23 in /usr/local/lib/python3.8/dist-packages (from jinja2->spacy<3.3.0,>=3.2.0->en-core-web-sm==3.2.0) (2.0.1)
Installing collected packages: en-core-web-sm
  Attempting uninstall: en-core-web-sm
    Found existing installation: en-core-web-sm 3.4.1
    Uninstalling en-core-web-sm-3.4.1:
      Successfully uninstalled en-core-web-sm-3.4.1
Successfully installed en-core-web-sm-3.2.0
```

```python
!pip install -r requirements.txt
```

```
Looking in indexes: https://pypi.org/simple, https://us-python.pkg.dev/colab-wheels/public/simple/
Requirement already satisfied: spacy in /usr/local/lib/python3.8/dist-packages (from -r requirements.txt (line 1)) (3.2.4)
Requirement already satisfied: bs4 in /usr/local/lib/python3.8/dist-packages (from -r requirements.txt (line 2)) (0.0.1)
Requirement already satisfied: urllib3 in /usr/local/lib/python3.8/dist-packages (from -r requirements.txt (line 3)) (1.24.3)
Requirement already satisfied: cymem<2.1.0,>=2.0.2 in /usr/local/lib/python3.8/dist-packages (from spacy->-r requirements.txt (line 1)) (2.0.7)
Requirement already satisfied: typer<0.5.0,>=0.3.0 in /usr/local/lib/python3.8/dist-packages (from spacy->-r requirements.txt (line 1)) (0.4.2)
Requirement already satisfied: spacy-loggers<2.0.0,>=1.0.0 in /usr/local/lib/python3.8/dist-packages (from spacy->-r requirements.txt (line 1)) (1.0.3)
Requirement already satisfied: wasabi<1.1.0,>=0.8.1 in /usr/local/lib/python3.8/dist-packages (from spacy->-r requirements.txt (line 1)) (0.10.1)
Requirement already satisfied: numpy>=1.15.0 in /usr/local/lib/python3.8/dist-packages (from spacy->-r requirements.txt (line 1)) (1.21.6)
Requirement already satisfied: pydantic!=1.8,!=1.8.1,<1.9.0,>=1.7.4 in /usr/local/lib/python3.8/dist-packages (from spacy->-r requirements.txt (line 1)) (1.8.2)
Requirement already satisfied: preshed<3.1.0,>=3.0.2 in /usr/local/lib/python3.8/dist-packages (from spacy->-r requirements.txt (line 1)) (3.0.8)
Requirement already satisfied: srsly<3.0.0,>=2.4.1 in /usr/local/lib/python3.8/dist-packages (from spacy->-r requirements.txt (line 1)) (2.4.5)
Requirement already satisfied: blis<0.8.0,>=0.4.0 in /usr/local/lib/python3.8/dist-packages (from spacy->-r requirements.txt (line 1)) (0.7.9)
Requirement already satisfied: pathy>=0.3.5 in /usr/local/lib/python3.8/dist-packages (from spacy->-r requirements.txt (line 1)) (0.10.0)
Requirement already satisfied: murmurhash<1.1.0,>=0.28.0 in /usr/local/lib/python3.8/dist-packages (from spacy->-r requirements.txt (line 1)) (1.0.9)
Requirement already satisfied: thinc<8.1.0,>=8.0.12 in /usr/local/lib/python3.8/dist-packages (from spacy->-r requirements.txt (line 1)) (8.0.17)
```

```
Requirement already satisfied: spacy-legacy<3.1.0,>=3.0.8 in /usr/local/lib/python3.8/dist-packages (from spacy->-r requirements.txt (line 1)) (3.0.10)
Requirement already satisfied: catalogue<2.1.0,>=2.0.6 in /usr/local/lib/python3.8/dist-packages (from spacy->-r requirements.txt (line 1)) (2.0.8)
Requirement already satisfied: langcodes<4.0.0,>=3.2.0 in /usr/local/lib/python3.8/dist-packages (from spacy->-r requirements.txt (line 1)) (3.3.0)
Requirement already satisfied: setuptools in /usr/local/lib/python3.8/dist-packages (from spacy->-r requirements.txt (line 1)) (57.4.0)
Requirement already satisfied: click<8.1.0 in /usr/local/lib/python3.8/dist-packages (from spacy->-r requirements.txt (line 1)) (7.1.2)
Requirement already satisfied: requests<3.0.0,>=2.13.0 in /usr/local/lib/python3.8/dist-packages (from spacy->-r requirements.txt (line 1)) (2.23.0)
Requirement already satisfied: jinja2 in /usr/local/lib/python3.8/dist-packages (from spacy->-r requirements.txt (line 1)) (2.11.3)
Requirement already satisfied: packaging>=20.0 in /usr/local/lib/python3.8/dist-packages (from spacy->-r requirements.txt (line 1)) (21.3)
Requirement already satisfied: tqdm<5.0.0,>=4.38.0 in /usr/local/lib/python3.8/dist-packages (from spacy->-r requirements.txt (line 1)) (4.64.1)
Requirement already satisfied: pyparsing!=3.0.5,>=2.0.2 in /usr/local/lib/python3.8/dist-packages (from packaging>=20.0->spacy->-r requirements.txt (line 1)) (3.0.9)
Requirement already satisfied: smart-open<6.0.0,>=5.2.1 in /usr/local/lib/python3.8/dist-packages (from pathy>=0.3.5->spacy->-r requirements.txt (line 1)) (5.2.1)
Requirement already satisfied: typing-extensions>=3.7.4.3 in /usr/local/lib/python3.8/dist-packages (from pydantic!=1.8,!=1.8.1,<1.9.0,>=1.7.4->spacy->-r requirements.txt (line 1)) (4.4.0)
Requirement already satisfied: idna<3,>=2.5 in /usr/local/lib/python3.8/dist-packages (from requests<3.0.0,>=2.13.0->spacy->-r requirements.txt (line 1)) (2.10)
Requirement already satisfied: chardet<4,>=3.0.2 in /usr/local/lib/python3.8/dist-packages (from requests<3.0.0,>=2.13.0->spacy->-r requirements.txt (line 1)) (3.0.4)
Requirement already satisfied: certifi>=2017.4.17 in /usr/local/lib/python3.8/dist-packages (from requests<3.0.0,>=2.13.0->spacy->-r requirements.txt (line 1)) (2022.9.24)
Requirement already satisfied: beautifulsoup4 in /usr/local/lib/python3.8/dist-packages (from bs4->-r requirements.txt (line 2)) (4.6.3)
Requirement already satisfied: MarkupSafe>=0.23 in /usr/local/lib/python3.8/dist-packages (from jinja2->spacy->-r requirements.txt (line 1)) (2.0.1)
```

```
!python3 example-doc.py
```

```
Seperating Preamble took 0.0011510848999023438
Creating doc for jdgement  took 0.0004112720489501953
0
Creating doc for preamble  took 8.082389831542969e-05
/content/drive/MyDrive/tok2vec/legal_ner.py:39: UserWarning: [W101] Skipping Doc custom extension 'trf_data' while merging docs.
  combined_doc = spacy.tokens.Doc.from_docs([doc_preamble, doc_judgment])
Combining took 0.39458799362182617
```

```
!python3 example-sent.py
```

```
Seperating Preamble took 0.0010387897491455078
Creating doc for jdgement  took 0.00040602684020996094
Traceback (most recent call last):
  File "example-sent.py", line 12, in <module>
    combined_doc = extract_entities_from_judgment_text(judgment_text,legal_nlp,preamble_spiltting_nlp,run_type,do_postprocess)
  File "/content/drive/MyDrive/tok2vec/legal_ner.py", line 30, in extract_entities_from_judgment_text
    print(len(doc_judgment.ents))
AttributeError: 'NoneType' object has no attribute 'ents'
```

```
                          config.cfg --output ./output --paths.train training/Combined_Data_Judgement_Preamble_spacy_format/train.spacy --paths.dev tr
                                    : output
ℹ Using GPU: 0

=========================== Initializing pipeline ===========================
[2022-12-13 06:27:42,782] [INFO] Set up nlp object from config
INFO:spacy:Set up nlp object from config
[2022-12-13 06:27:42,791] [INFO] Pipeline: ['tok2vec', 'ner']
INFO:spacy:Pipeline: ['tok2vec', 'ner']
[2022-12-13 06:27:42,795] [INFO] Created vocabulary
INFO:spacy:Created vocabulary
[2022-12-13 06:27:42,796] [INFO] Finished initializing nlp object
INFO:spacy:Finished initializing nlp object
[2022-12-13 06:28:18,873] [INFO] Initialized pipeline components: ['tok2vec', 'ner']
INFO:spacy:Initialized pipeline components: ['tok2vec', 'ner']
✔ Initialized pipeline

============================= Training pipeline =============================
ℹ Pipeline: ['tok2vec', 'ner']
ℹ Initial learn rate: 0.0
E    #       LOSS TOK2VEC  LOSS NER  ENTS_F  ENTS_P  ENTS_R  SCORE
---  ------  ------------  --------  ------  ------  ------  ------
  0       0          0.00    562.09    0.05    0.10    0.03    0.00
  2    1000      22491.84 442896.63    9.27   15.38    6.64    0.09
  4    2000      26206.99 115929.50   28.50   36.01   23.58    0.28
  7    3000      13548.04  94396.12   39.13   47.65   33.19    0.39
  9    4000      10219.05  83704.00   46.81   53.29   41.74    0.47
 11    5000      16309.78  77556.99   53.40   58.93   48.81    0.53
 14    6000      15914.01  71689.60   56.72   61.86   52.38    0.57
 16    7000      24979.16  67342.88   60.12   64.65   56.18    0.60
 18    8000      12157.20  62183.88   62.49   67.38   58.26    0.62
 21    9000      14115.27  59941.75   64.04   68.30   60.27    0.64
 23   10000      20031.31  57265.53   64.79   68.46   61.49    0.65
 26   11000      20557.18  55236.30   65.69   69.77   62.05    0.66
 28   12000      15454.74  52842.83   66.31   69.61   63.31    0.66
 30   13000      16154.05  51947.57   66.70   71.15   62.78    0.67
 33   14000      18024.96  50176.31   67.11   71.44   63.28    0.67
 35   15000      15575.83  48244.88   67.75   71.88   64.07    0.68
 37   16000      18352.13  48384.14   68.35   72.86   64.37    0.68
 40   17000      18821.86  47106.53   68.34   72.42   64.70    0.68
 42   18000      19132.45  46642.62   68.70   73.01   64.86    0.69
 44   19000      18544.09  45482.97   68.60   72.39   65.19    0.69
 47   20000      18774.82  44101.84   68.24   71.74   65.06    0.68
 49   21000      18518.99  43769.86   68.78   72.38   65.52    0.69
 52   22000      19194.20  43630.19   68.53   72.31   65.13    0.69
 54   23000      20028.21  43317.59   69.13   72.75   65.85    0.69
 56   24000      20364.65  42433.78   69.23   72.73   66.05    0.69
 59   25000      19706.07  42172.04   69.57   73.05   66.41    0.70
 61   26000      20534.99  41570.66   69.60   73.42   66.15    0.70
 63   27000      21535.96  42246.06   69.63   73.28   66.31    0.70
 66   28000      20324.34  40946.50   69.77   73.37   66.51    0.70
 68   29000      20355.18  41473.79   69.74   73.29   66.51    0.70
 70   30000      19986.58  41225.31   69.73   73.35   66.45    0.70
 73   31000      19676.10  41245.55   69.73   73.35   66.45    0.70
 75   32000      22797.65  41435.46   69.73   73.35   66.45    0.70
 78   33000      19760.01  41551.92   69.73   73.35   66.45    0.70
✔ Saved pipeline to output directory
output/model-last
```

Saving... ✕