(.venv) zhangxiaoyu@zhangxiaoyudeMacBook-Pro Homework10 % python q6_test.py
/Library/Frameworks/Python.framework/Versions/3.12/Resources/Python.app/Contents/
MacOS/Python: can't open file '/Users/zhangxiaoyu/Desktop/Homework10/q6_test.py': [Errno
2] No such file or directory
(.venv) zhangxiaoyu@zhangxiaoyudeMacBook-Pro Homework10 % cd machine-learning-
zoomcamp/cohorts/2025/05-deployment/homework
(.venv) zhangxiaoyu@zhangxiaoyudeMacBook-Pro homework % python q6_test.py
Traceback (most recent call last):
  File "/Users/zhangxiaoyu/Desktop/Homework10/machine-learning-zoomcamp/cohorts/
2025/05-deployment/homework/q6_test.py", line 1, in <module>
    import requests
ModuleNotFoundError: No module named 'requests'
(.venv) zhangxiaoyu@zhangxiaoyudeMacBook-Pro homework % pip install requests
Collecting requests
  Obtaining dependency information for requests from https://files.pythonhosted.org/packages/
1e/db/4254e3eabe8020b458f1a747140d32277ec7a271daf1d235b70dc0b4e6e3/
requests-2.32.5-py3-none-any.whl.metadata
  Using cached requests-2.32.5-py3-none-any.whl.metadata (4.9 kB)
Collecting charset_normalizer<4,>=2 (from requests)
  Obtaining dependency information for charset_normalizer<4,>=2 from https://
files.pythonhosted.org/packages/
f3/85/1637cd4af66fa687396e757dec650f28025f2a2f5a5531a3208dc0ec43f2/
charset_normalizer-3.4.4-cp312-cp312-macosx_10_13_universal2.whl.metadata
  Using cached charset_normalizer-3.4.4-cp312-cp312-
macosx_10_13_universal2.whl.metadata (37 kB)
Collecting idna<4,>=2.5 (from requests)
  Obtaining dependency information for idna<4,>=2.5 from https://files.pythonhosted.org/
packages/0e/61/66938bbb5fc52dbdf84594873d5b51fb1f7c7794e9c0f5bd885f30bc507b/
idna-3.11-py3-none-any.whl.metadata
  Using cached idna-3.11-py3-none-any.whl.metadata (8.4 kB)
Collecting urllib3<3,>=1.21.1 (from requests)
  Obtaining dependency information for urllib3<3,>=1.21.1 from https://files.pythonhosted.org/
packages/6d/b9/4095b668ea3678bf6a0af005527f39de12fb026516fb3df17495a733b7f8/
urllib3-2.6.2-py3-none-any.whl.metadata
  Downloading urllib3-2.6.2-py3-none-any.whl.metadata (6.6 kB)
Collecting certifi>=2017.4.17 (from requests)
  Obtaining dependency information for certifi>=2017.4.17 from https://files.pythonhosted.org/
packages/70/7d/9bc192684cea499815ff478dfcdc13835ddf401365057044fb721ec6bddb/
certifi-2025.11.12-py3-none-any.whl.metadata
  Using cached certifi-2025.11.12-py3-none-any.whl.metadata (2.5 kB)
Using cached requests-2.32.5-py3-none-any.whl (64 kB)
Using cached certifi-2025.11.12-py3-none-any.whl (159 kB)
Using cached charset_normalizer-3.4.4-cp312-cp312-macosx_10_13_universal2.whl (208 kB)
Using cached idna-3.11-py3-none-any.whl (71 kB)
Downloading urllib3-2.6.2-py3-none-any.whl (131 kB)

131.2/131.2 kB 219.7 kB/s eta 0:00:00
Installing collected packages: urllib3, idna, charset_normalizer, certifi, requests
Successfully installed certifi-2025.11.12 charset_normalizer-3.4.4 idna-3.11 requests-2.32.5
urllib3-2.6.2

[notice] A new release of pip is available: 23.2.1 -> 25.3
[notice] To update, run: pip install --upgrade pip
(.venv) zhangxiaoyu@zhangxiaoyudeMacBook-Pro homework % python q6_test.py

{'conversion_probability': 0.49999999999842815, 'conversion': False}
(.venv) zhangxiaoyu@zhangxiaoyudeMacBook-Pro homework % kind --version
zsh: command not found: kind
[notice] A new release of pip is available: 23.2.1 -> 25.3
[notice] To update, run: pip install --upgrade pip
(.venv) zhangxiaoyu@zhangxiaoyudeMacBook-Pro homework % curl -LO "https://dl.k8s.io/release/$(curl -L -s https://dl.k8s.io/release/stable.txt)/bin/darwin/amd64/kubectl"

```
  % Total    % Received % Xferd  Average Speed   Time    Time     Time  Current
                                 Dload  Upload   Total   Spent    Left  Speed
100  138  100  138    0     0    279      0 --:--:-- --:--:-- --:--:--   279
  6 58.9M    6 4225k    0     0   1111      0 15:27:55  1:04:52 14:23:03    0^Z
```
zsh: suspended curl -LO
(.venv) zhangxiaoyu@zhangxiaoyudeMacBook-Pro homework % curl -LO "https://dl.k8s.io/release/$(curl -L -s https://dl.k8s.io/release/stable.txt)/bin/darwin/amd64/kubectl"
```
  % Total    % Received % Xferd  Average Speed   Time    Time     Time  Current
                                 Dload  Upload   Total   Spent    Left  Speed
    0     0    0     0    0     0      0      0 --:--:--  0:00:23 --:--:--    0^Z
```
zsh: suspended curl -LO
(.venv) zhangxiaoyu@zhangxiaoyudeMacBook-Pro homework % curl -LO "https://dl.k8s.io/release/$(curl -L -s https://dl.k8s.io/release/stable.txt)/bin/darwin/amd64/kubectl"
```
  % Total    % Received % Xferd  Average Speed   Time    Time     Time  Current
                                 Dload  Upload   Total   Spent    Left  Speed
100  138  100  138    0     0    402      0 --:--:-- --:--:-- --:--:--   402
100 58.9M  100 58.9M    0     0   421k      0  0:02:23  0:02:23 --:--:--  693k
```
(.venv) zhangxiaoyu@zhangxiaoyudeMacBook-Pro homework % echo "$(cat kubectl.sha256) kubectl" | shasum -a 256 --check
cat: kubectl.sha256: No such file or directory
shasum: standard input: no properly formatted SHA checksum lines found
(.venv) zhangxiaoyu@zhangxiaoyudeMacBook-Pro homework % chmod +x ./kubectl
(.venv) zhangxiaoyu@zhangxiaoyudeMacBook-Pro homework % sudo mv ./kubectl /usr/local/bin/kubectl
sudo chown root: /usr/local/bin/kubectl
Password:
(.venv) zhangxiaoyu@zhangxiaoyudeMacBook-Pro homework % kubectl version --client
Client Version: v1.34.3
Kustomize Version: v5.7.1
(.venv) zhangxiaoyu@zhangxiaoyudeMacBook-Pro homework % [$(uname -m) = x86_64] && curl -Lo ./kind https://kind.sigs.k8s.io/dl/v0.30.0/kind-darwin-amd64
```
  % Total    % Received % Xferd  Average Speed   Time    Time     Time  Current
                                 Dload  Upload   Total   Spent    Left  Speed
100   98  100   98    0     0    244      0 --:--:-- --:--:-- --:--:--   245
    0     0    0     0    0     0      0      0 --:--:-- --:--:-- --:--:--    0
100 10.6M  100 10.6M    0     0  1848k      0  0:00:05  0:00:05 --:--:-- 2489k
```
(.venv) zhangxiaoyu@zhangxiaoyudeMacBook-Pro homework % kind --version
zsh: command not found: kind
(.venv) zhangxiaoyu@zhangxiaoyudeMacBook-Pro homework % chmod +x ./kind
(.venv) zhangxiaoyu@zhangxiaoyudeMacBook-Pro homework % sudo mv ./kubectl /usr/local/bin/kind
sudo chown root: /usr/local/bin/kind
Password:
mv: rename ./kubectl to /usr/local/bin/kind: No such file or directory
chown: /usr/local/bin/kind: No such file or directory

(.venv) zhangxiaoyu@zhangxiaoyudeMacBook-Pro homework % sudo mv ./kind /usr/local/bin/kind
sudo chown root: /usr/local/bin/kind
(.venv) zhangxiaoyu@zhangxiaoyudeMacBook-Pro homework % kind --version
kind version 0.30.0
(.venv) zhangxiaoyu@zhangxiaoyudeMacBook-Pro homework % docker pull kindest/node:v1.34.0
kind create cluster --image kindest/node:v1.34.0
v1.34.0: Pulling from kindest/node
21eef5099de6: Pull complete
904fa8114083: Pull complete
Digest: sha256:7416a61b42b1662ca6ca89f02028ac133a309a2a30ba309614e8ec94d976dc5a
Status: Downloaded newer image for kindest/node:v1.34.0
docker.io/kindest/node:v1.34.0
Creating cluster "kind" ...

 ✓ Ensuring node image (kindest/node:v1.34.0) 🖼️

 ✓ Preparing nodes 📦

 ✓ Writing configuration 📜

 ✓ Starting control-plane 🕹️

 ✓ Installing CNI 🔌

 ✓ Installing StorageClass 💾
Set kubectl context to "kind-kind"
You can now use your cluster with:

kubectl cluster-info --context kind-kind

Have a nice day! 👋

(.venv) zhangxiaoyu@zhangxiaoyudeMacBook-Pro homework % kubectl cluster-info
Kubernetes control plane is running at https://127.0.0.1:61726
CoreDNS is running at https://127.0.0.1:61726/api/v1/namespaces/kube-system/services/kube-dns:dns/proxy

To further debug and diagnose cluster problems, use 'kubectl cluster-info dump'.
(.venv) zhangxiaoyu@zhangxiaoyudeMacBook-Pro homework % kubectl get svc
NAME   TYPE   CLUSTER-IP   EXTERNAL-IP   PORT(S)   AGE
kubernetes   ClusterIP   10.96.0.1   <none>   443/TCP   4h10m
(.venv) zhangxiaoyu@zhangxiaoyudeMacBook-Pro homework %