```
Command Prompt                                                          —   □   ✕

C:\Users\DELL>docker tag name:latest sarthakd112

C:\Users\DELL>/
'/' is not recognized as an internal or external command,
operable program or batch file.

C:\Users\DELL>docker tag name:latest sarthakd112/demo:project_k8s

C:\Users\DELL>docker push sarthakd112/demo:project_k8s
The push refers to repository [docker.io/sarthakd112/demo]
29b1c1058e52: Pushed
329f32cb02ae: Pushed
8f6abbe1a85a: Pushed
751099644975: Pushed
791d1fa9fa5d: Pushed
99798c34b40a: Pushed
f566c57e6f2d: Pushed
project_k8s: digest: sha256:3509ca163eab7b778b8e2def4406683e5e998bfa07443d89726ea499339960e7 size: 1783

C:\Users\DELL>
```

```
✕  File  Edit  Selection  View  Go  Run  Terminal  Help        app.py - work - Visual Studio Code        ▢ ▢ ▢ ▢  —  ⬜  ✕

   ⬢ app.py  ✕    ⬢ dockerfile    ≡ requirements.txt    <> index.html    ! mysql.yaml 1                    ▷ ∨ ▢ ⋯

   newa > ⬢ app.py > ...
      1  ∨ from flask import Flask, render_template
      2    import random
      3    |
      4    app = Flask(__name__)
      5
      6    # list of cat images
      7  ∨ images = [
      8      "http://ak-hdl.buzzfed.com/static/2013-10/enhanced/webdr05/15/9/anigif_enhanced-buzz-26388-1381844103-11.gif",
      9      "http://ak-hdl.buzzfed.com/static/2013-10/enhanced/webdr01/15/9/anigif_enhanced-buzz-31540-1381844535-8.gif",
     10      "http://ak-hdl.buzzfed.com/static/2013-10/enhanced/webdr05/15/9/anigif_enhanced-buzz-26390-1381844163-18.gif",
     11      "http://ak-hdl.buzzfed.com/static/2013-10/enhanced/webdr06/15/10/anigif_enhanced-buzz-1376-1381846217-0.gif",
     12      "http://ak-hdl.buzzfed.com/static/2013-10/enhanced/webdr03/15/9/anigif_enhanced-buzz-3391-1381844336-26.gif",
     13      "http://ak-hdl.buzzfed.com/static/2013-10/enhanced/webdr06/15/10/anigif_enhanced-buzz-29111-1381845968-0.gif",
     14      "http://ak-hdl.buzzfed.com/static/2013-10/enhanced/webdr03/15/9/anigif_enhanced-buzz-3409-1381844582-13.gif",
     15      "http://ak-hdl.buzzfed.com/static/2013-10/enhanced/webdr02/15/9/anigif_enhanced-buzz-19667-1381844937-10.gif",
     16      "http://ak-hdl.buzzfed.com/static/2013-10/enhanced/webdr05/15/9/anigif_enhanced-buzz-26358-1381845043-13.gif",
     17      "http://ak-hdl.buzzfed.com/static/2013-10/enhanced/webdr06/15/9/anigif_enhanced-buzz-18774-1381844645-6.gif",
     18      "http://ak-hdl.buzzfed.com/static/2013-10/enhanced/webdr06/15/9/anigif_enhanced-buzz-25158-1381844793-0.gif",
     19      "http://ak-hdl.buzzfed.com/static/2013-10/enhanced/webdr03/15/10/anigif_enhanced-buzz-11980-1381846269-1.gif"
     20    ]
     21
     22    @app.route('/')
     23  ∨ def index():
     24        url = random.choice(images)
     25        return render_template('index.html', url=url)
     26
     27  ∨ if __name__ == "__main__":
     28        app.run(host="0.0.0.0")

   PROBLEMS 1   DEBUG CONSOLE   TERMINAL   OUTPUT                              ▷ powershell  + ∨ ▢ 🗑 ⋯ ✕

   pod1-6d45796669-vfb6b   0/1      ImagePullBackOff   0        3h25m
   PS D:\work> []

✕  ⊗ 0 ⚠ 1   minikube   default                              Ln 3, Col 1  Spaces: 4  UTF-8  CRLF  Python  3.11.0 64-bit  ⚡ 🔔
```

app.py    dockerfile ✕    requirements.txt    ◇ index.html    ! mysql.yaml 1

newa > 🐳 dockerfile > ...

```dockerfile
1   # our base image
2   FROM alpine:3.5
3
4   # Install python and pip
5   RUN apk add --update py2-pip
6
7   # upgrade pip
8   RUN pip install --upgrade pip
9
10  # install Python modules needed by the Python app
11  COPY requirements.txt /usr/src/app/
12  RUN pip install --no-cache-dir -r /usr/src/app/requirements.txt
13
14  # copy files required for the app to run
15  COPY app.py /usr/src/app/
16  COPY index.html /usr/src/app/templates/
17
18  # tell the port number the container should expose
19  EXPOSE 5000
20
21  # run the application
22  CMD ["python", "/usr/src/app/app.py"]
23
```

PROBLEMS 1    DEBUG CONSOLE    TERMINAL    OUTPUT                          powershell

```
pod1-6d45796669-vfb6b    0/1    ImagePullBackOff    0    3h25m
PS D:\work> 
```

⊗ 0 ⚠ 1    minikube    default                    Ln 16, Col 6    Spaces: 4    UTF-8    CRLF    Dockerfile

---

app.py    dockerfile    requirements.txt    ◇ index.html ✕    ! mysql.yaml 1

newa > ◇ index.html > ❖ html

```html
1   <html>
2     <head>
3       <style type="text/css">
4         body {
5           background: black;
6           color: white;
7         }
8         div.container {
9           max-width: 500px;
10          margin: 100px auto;
11          border: 20px solid white;
12          padding: 10px;
13          text-align: center;
14        }
15        h4 {
16          text-transform: uppercase;
17        }
18      </style>
19    </head>
20    <body>
21      <div class="container">
22        <h4>Cat Gif of the day</h4>
23        <img src="{{url}}" />
24        <p><small>Courtesy: <a href="http://www.buzzfeed.com/copyranter/the-best-cat-gif-post-in-the-history-of-cat-gifs">Buzzfeed</a></small></p>
25      </div>
26    </body>
27  </html>
```

PROBLEMS 1    DEBUG CONSOLE    TERMINAL    OUTPUT                          powershell

```
pod1-6d45796669-vfb6b    0/1    ImagePullBackOff    0    3h25m
PS D:\work> 
```

⊗ 0 ⚠ 1    minikube    default                    Ln 27, Col 8    Spaces: 4    UTF-8    CRLF    HTML

File  Edit  Selection  View  Go  Run  Terminal  Help

🐍 app.py    🐳 dockerfile    ≡ requirements.txt    <> index.html ✕    ! mysql.yaml 1

newa > <> index.html > 🔂 html
    1    <html>

PROBLEMS 1    DEBUG CONSOLE    **TERMINAL**    OUTPUT

```
PS D:\work> minikube start
😄  minikube v1.30.1 on Microsoft Windows 10 Pro For Workstations 10.0.19045.2
846 Build 19045.2846
✨  Using the docker driver based on existing profile
👍  Starting control plane node minikube in cluster minikube
🚜  Pulling base image ...
🔄  Restarting existing docker container for "minikube" ...
🐳  Preparing Kubernetes v1.26.3 on Docker 23.0.2 ...
⊘  Configuring bridge CNI (Container Networking Interface) ...
🔎  Verifying Kubernetes components...
❗  Executing "docker container inspect minikube --format={{.State.Status}}" t
o
ok an unusually long time: 2.4141319s
💡  Restarting the docker service may improve performance.
    ▪ Using image gcr.io/k8s-minikube/storage-provisioner:v5
    ▪ Using image docker.io/kubernetesui/dashboard:v2.7.0
💡  Some dashboard features require the metrics-server addon. To enable all fe
atures please run:

        minikube addons enable metrics-server

🌟  Enabled addons: default-storageclass, storage-provisioner, dashboard
🏄  Done! kubectl is now configured to use "minikube" cluster and "default" na
mespace by default
PS D:\work> kubectl get pods
NAME                    READY    STATUS            RESTARTS        AGE
imag-57596d9bd9-9zgdg   0/1      ImagePullBackOff  19 (3d21h ago)  3d23h
PS D:\work> kubectl describe pod my-pod
Error from server (NotFound): pods "my-pod" not found
PS D:\work> kubectl describe pod imag-57596d9bd9-9zgdg
Name:           imag-57596d9bd9-9zgdg
Namespace:      default
Priority:       0
Service Account: default
```

⊗ 0 ⚠ 1    minikube    default

---

File  Edit  Selection  View  Go  Run  Terminal  Help

Explorer (Ctrl+Shift+E)    🐳 dockerfile    ≡ requirements.txt    <> index.html ✕    ! mysql.yaml 1

newa > <> index.html > 🔂 html
    1    <html>

PROBLEMS 1    DEBUG CONSOLE    **TERMINAL**    OUTPUT

```
Namespace:      default
Priority:       0
Service Account: default
Node:           minikube/192.168.49.2
Start Time:     Fri, 28 Apr 2023 15:18:40 +0530
Labels:         app=imag
                pod-template-hash=57596d9bd9
Annotations:    <none>
Status:         Running
IP:             10.244.0.7
IPs:
  IP:           10.244.0.7
Controlled By:  ReplicaSet/imag-57596d9bd9
Containers:
  mysql:
    Container ID:   docker://15855ae3740d804696f1f698e9c9d73076287d53bd350ea15
4d763e0d0958456
    Image:          mysql
    Image ID:       docker-pullable://mysql@sha256:a43f6e7e7f3a5e5b90f857fbed4
e3103ece771b19f0f75880f767cf66bbb6577
    Port:           <none>
    Host Port:      <none>
    State:          Waiting
      Reason:       CrashLoopBackOff
    Last State:     Terminated
      Reason:       Error
      Exit Code:    1
      Started:      Tue, 02 May 2023 14:43:19 +0530
      Finished:     Tue, 02 May 2023 14:43:21 +0530
    Ready:          False
    Restart Count:  21
    Environment:    <none>
    Mounts:
```

⊗ 0 ⚠ 1    minikube    default

File   Edit   Selection   View   Go   Run   Terminal   Help

🐍 app.py        🐳 dockerfile        ≡ requirements.txt        <> index.html ✕        ⚠ mysql.yaml 1

newa > <> index.html > ⊘ html
    1    <html>

PROBLEMS 1    DEBUG CONSOLE    TERMINAL    OUTPUT

```
   Environment:     <none>
   Mounts:
     /var/run/secrets/kubernetes.io/serviceaccount from kube-api-access-jzttt
 (ro)
Conditions:
  Type              Status
  Initialized       True
  Ready             False
  ContainersReady   False
  PodScheduled      True
Volumes:
  kube-api-access-jzttt:
    Type:                    Projected (a volume that contains injected data f
rom multiple sources)
    TokenExpirationSeconds:  3607
    ConfigMapName:           kube-root-ca.crt
    ConfigMapOptional:       <nil>
    DownwardAPI:             true
QoS Class:                   BestEffort
Node-Selectors:              <none>
Tolerations:                 node.kubernetes.io/not-ready:NoExecute op=Exists
for 300s
                             node.kubernetes.io/unreachable:NoExecute op=Exist
s for 300s
Events:
  Type     Reason          Age                     From       Message
  ----     ------          ----                    ----       -------
  Warning  BackOff         3d21h (x332 over 3d23h)  kubelet    Back-off restarti
ng failed container mysql in pod imag-57596d9bd9-9zgdg_default(1bc600a9-24ac-4
776-9bbc-13ba8b99791f)
  Normal   SandboxChanged  2m40s                   kubelet    Pod sandbox chang
ed, it will be killed and re-created.
  Warning  Failed          101s                    kubelet    Failed to pull im
```

⊗ 0 ⚠ 1    minikube    default

---

File   Edit   Selection   View   Go   Run   Terminal   Help

🐍 app.py        🐳 dockerfile        ≡ requirements.txt        <> index.html ✕        ⚠ mysql.yaml 1

newa > <> index.html > ⊘ html
    1    <html>

PROBLEMS 1    DEBUG CONSOLE    TERMINAL    OUTPUT

```
age "mysql": rpc error: code = Unknown desc = Error response from daemon: Get
"https://registry-1.docker.io/v2/": net/http: TLS handshake timeout
  Warning  Failed          101s                         kubelet   Error: ErrImagePu
ll
  Normal   BackOff         101s                         kubelet   Back-off pulling
image "mysql"
  Warning  Failed          101s                         kubelet   Error: ImagePullB
ackOff
  Normal   Pulled          79s                          kubelet   Successfully pull
ed image "mysql" in 5.506265769s (5.506312669s including waiting)
  Normal   Pulling         25s (x3 over 113s)           kubelet   Pulling image "my
sql"
  Normal   Created         21s (x2 over 79s)            kubelet   Created container
 mysql
  Normal   Pulled          21s                          kubelet   Successfully pull
  Normal   Started         17s (x2 over 78s)            kubelet   Started container
  Warning  BackOff         3s (x6 over 73s)             kubelet   Back-off restarti
f)
PS D:\work> kubectl scale rs
error: required flag(s) "replicas" not set
PS D:\work> kubectl get rs
NAME             DESIRED   CURRENT   READY   AGE
imag-57596d9bd9   1         1         0       3d23h
PS D:\work> kubectl scale rs imag-57596d9bd9 --replicas=4
replicaset.apps/imag-57596d9bd9 scaled
PS D:\work> kubectl get rs
NAME             DESIRED   CURRENT   READY   AGE
imag-57596d9bd9   1         1         0       3d23h
PS D:\work> kubectl get pods
NAME                     READY   STATUS        RESTARTS   AGE
imag-57596d9bd9-9zgdg    0/1     Error         23         3d23h
imag-57596d9bd9-jgw9t    0/1     Terminating   0          14s
imag-57596d9bd9-p5m48    0/1     Terminating   0          11s
```

⊗ 0 ⚠ 1    minikube    default

```
PS D:\work> kubectl get pods
imag                    0/1    ImagePullBackOff    0               34s
imag-57596d9bd9-9zgdg   0/1    CrashLoopBackOff    26 (46s ago)    3d23h
REPOSITORY                          TAG        IMAGE ID        CREATED       SIZE
project_image                       latest     54c3711ee257    4 days ago    1.22GB
mysql                               latest     8189e588b0e8    2 weeks ago   564MB
gcr.io/k8s-minikube/kicbase         v0.0.39    67a4b1138d2d    4 weeks ago   1.05GB
PS D:\work> kubectl get pods
imag                    0/1    ErrImagePull        0               76s
imag-57596d9bd9-9zgdg   0/1    CrashLoopBackOff    26 (88s ago)    3d23h
PS D:\work> kubectl get svc
NAME          TYPE         CLUSTER-IP    EXTERNAL-IP    PORT(S)    AGE
kubernetes    ClusterIP    10.96.0.1     <none>         443/TCP    5d
PS D:\work> kubectl create deployment pod1 --image=name
deployment.apps/pod1 created
PS D:\work> kubectl get pods
NAME                    READY    STATUS              RESTARTS          AGE
imag                    0/1      ImagePullBackOff    0                 70m
imag-57596d9bd9-9zgdg   0/1      CrashLoopBackOff    39 (3m49s ago)    4d
pod1-6d45796669-s474x   0/1      ContainerCreating   0                 4s
PS D:\work> kubectl describe pod pod1
Name:               pod1-6d45796669-s474x
Namespace:          default
Priority:           0
Service Account:    default
Node:               minikube/192.168.49.2
Start Time:         Tue, 02 May 2023 16:13:55 +0530
Labels:             app=pod1
                    pod-template-hash=6d45796669
Annotations:        <none>
Status:             Pending
IP:                 10.244.0.15
IPs:
```

`⊗ 0 ⚠ 1    minikube    default`

```
IP:               10.244.0.15
IPs:
  IP:             10.244.0.15
Controlled By:    ReplicaSet/pod1-6d45796669
Containers:
  name:
    Container ID:
    Image:          name
    Image ID:
    Port:           <none>
    Host Port:      <none>
    State:          Waiting
      Reason:       ImagePullBackOff
    Ready:          False
    Restart Count:  0
    Environment:    <none>
    Mounts:
      /var/run/secrets/kubernetes.io/serviceaccount from kube-api-access-8dlrt (ro)
Conditions:
  Type              Status
  Initialized       True
  Ready             False
  ContainersReady   False
  PodScheduled      True
Volumes:
  kube-api-access-8dlrt:
    Type:                    Projected (a volume that contains injected data from multiple sources)
    TokenExpirationSeconds:  3607
    ConfigMapName:           kube-root-ca.crt
    ConfigMapOptional:       <nil>
    DownwardAPI:             true
QoS Class:                   BestEffort
Node-Selectors:              <none>
```

`⊗ 0 ⚠ 1    minikube    default`

app.py     dockerfile     ≡ requirements.txt     ◇ index.html ✕     ! mysql.yaml 1

newa > ◇ index.html > ⊘ html
   1    <html>

PROBLEMS 1     DEBUG CONSOLE     TERMINAL     OUTPUT                                                    powershell + ∨

```
Node-Selectors:              <none>
                             node.kubernetes.io/unreachable:NoExecute op=Exists for 300s

  Type     Reason     Age               From               Message
  ----     ------     ---               ----               -------
  Normal   Scheduled  27s               default-scheduler  Successfully assigned default/pod1-6d45796669-s474x to minikube
  Normal   BackOff    18s               kubelet            Back-off pulling image "name"
  Warning  Failed     18s               kubelet            Error: ImagePullBackOff
  Normal   Pulling    6s (x2 over 23s)  kubelet            Pulling image "name"
  Warning  Failed     1s (x2 over 19s)  kubelet            Failed to pull image "name": rpc error: code = Unknown desc = Error response from daemon: pull access denied for name
  Warning  Failed     1s (x2 over 19s)  kubelet            Error: ErrImagePull

PS D:\work> kubectl scale deployment pod1 --replicas=4
deployment.apps/pod1 scaled
PS D:\work> kubectl get pods
NAME                      READY   STATUS             RESTARTS   AGE
imag                      0/1     ImagePullBackOff   0          72m
pod1-6d45796669-4xnhh     0/1     ContainerCreating  0          10s
pod1-6d45796669-pdrlp     0/1     ContainerCreating  0          10s
pod1-6d45796669-s474x     0/1     ErrImagePull       0          80s
pod1-6d45796669-vfb6b     0/1     ContainerCreating  0          10s
PS D:\work> kubectl get pods
NAME                      READY   STATUS             RESTARTS   AGE
imag                      0/1     ImagePullBackOff   0          72m
pod1-6d45796669-4xnhh     0/1     ContainerCreating  0          23s
pod1-6d45796669-pdrlp     0/1     ContainerCreating  0          23s
pod1-6d45796669-s474x     0/1     ImagePullBackOff   0          93s
pod1-6d45796669-vfb6b     0/1     ErrImagePull       0          23s
PS D:\work> kubectl get pods
NAME                      READY   STATUS             RESTARTS   AGE
imag                      0/1     ImagePullBackOff   0          72m
pod1-6d45796669-4xnhh     0/1     ErrImagePull       0          31s
pod1-6d45796669-pdrlp     0/1     ErrImagePull       0          31s
pod1-6d45796669-s474x     0/1     ImagePullBackOff   0          101s
```

⊗ 0 ⚠ 1   minikube   default                                              Ln 27, Col 8   Spaces: 4   UTF-8   CRLF   HTML

---

⌂ hub.docker.com/repository/docker/sarthakd112/demo/general

🌐 **sarthakd112 / demo**                              **Docker commands**                          [ Public View ]

**Description**                                        To push a new tag to this repository,

This repository does not have a description ✏          ```
                                                       docker push sarthakd112/demo:tagname
🕐 Last pushed: 6 hours ago                             ```

**Tags**                                               **Automated Builds**

This repository contains 1 tag(s).                     Manually pushing images to Hub? Connect your account to GitHub or
                                                       Bitbucket to automatically build and tag new images whenever your
| Tag | OS | Type | Pulled | Pushed |                 code is updated, so you can focus your time on creating.
|-----|----|----|----|----|
| ● project_k8s | △ | Image | --- | 7 hours ago |      Available with Pro, Team and Business subscriptions. Read more about
                                                       automated builds ↗.
See all                    Go to Advanced Image Management
                                                       [ Upgrade ]

**README** ⓘ ✏

Repository description is empty. Click here to edit.

ENG   11:54 PM

newa > index.html > html
```
 1    <html>
```

PROBLEMS 1    DEBUG CONSOLE    TERMINAL    OUTPUT

```
pod1-6d45796669-vfb6b      0/1    ImagePullBackOff    0              3h25m
PS D:\work> kubectl get pods
NAME                       READY  STATUS              RESTARTS       AGE
imag                       0/1    ImagePullBackOff    0              8h
imag-57596d9bd9-9zgdg      0/1    CrashLoopBackOff    90 (3m22s ago) 4d8h
pod1-6d45796669-4xnhh      0/1    ImagePullBackOff    0              7h39m
pod1-6d45796669-pdrlp      0/1    ImagePullBackOff    0              7h39m
pod1-6d45796669-s474x      0/1    ImagePullBackOff    0              7h40m
pod1-6d45796669-vfb6b      0/1    ImagePullBackOff    0              7h39m
PS D:\work> kubectl get pods
NAME                       READY  STATUS              RESTARTS       AGE
imag                       0/1    ImagePullBackOff    0              8h
imag-57596d9bd9-9zgdg      0/1    CrashLoopBackOff    90 (3m23s ago) 4d8h
pod1-6d45796669-4xnhh      0/1    ImagePullBackOff    0              7h39m
pod1-6d45796669-pdrlp      0/1    ImagePullBackOff    0              7h39m
pod1-6d45796669-s474x      0/1    ImagePullBackOff    0              7h41m
pod1-6d45796669-vfb6b      0/1    ImagePullBackOff    0              7h39m
PS D:\work>
```

Not secure | 192.168.1.18:8888

CAT GIF OF THE DAY

Courtesy: Buzzfeed