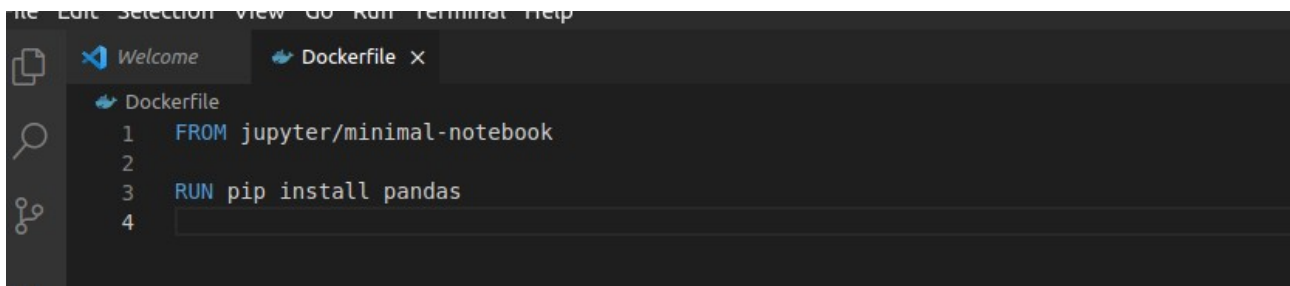


Name : Qadeer Hussain
Roll No : 2303.KHI.DEG.006

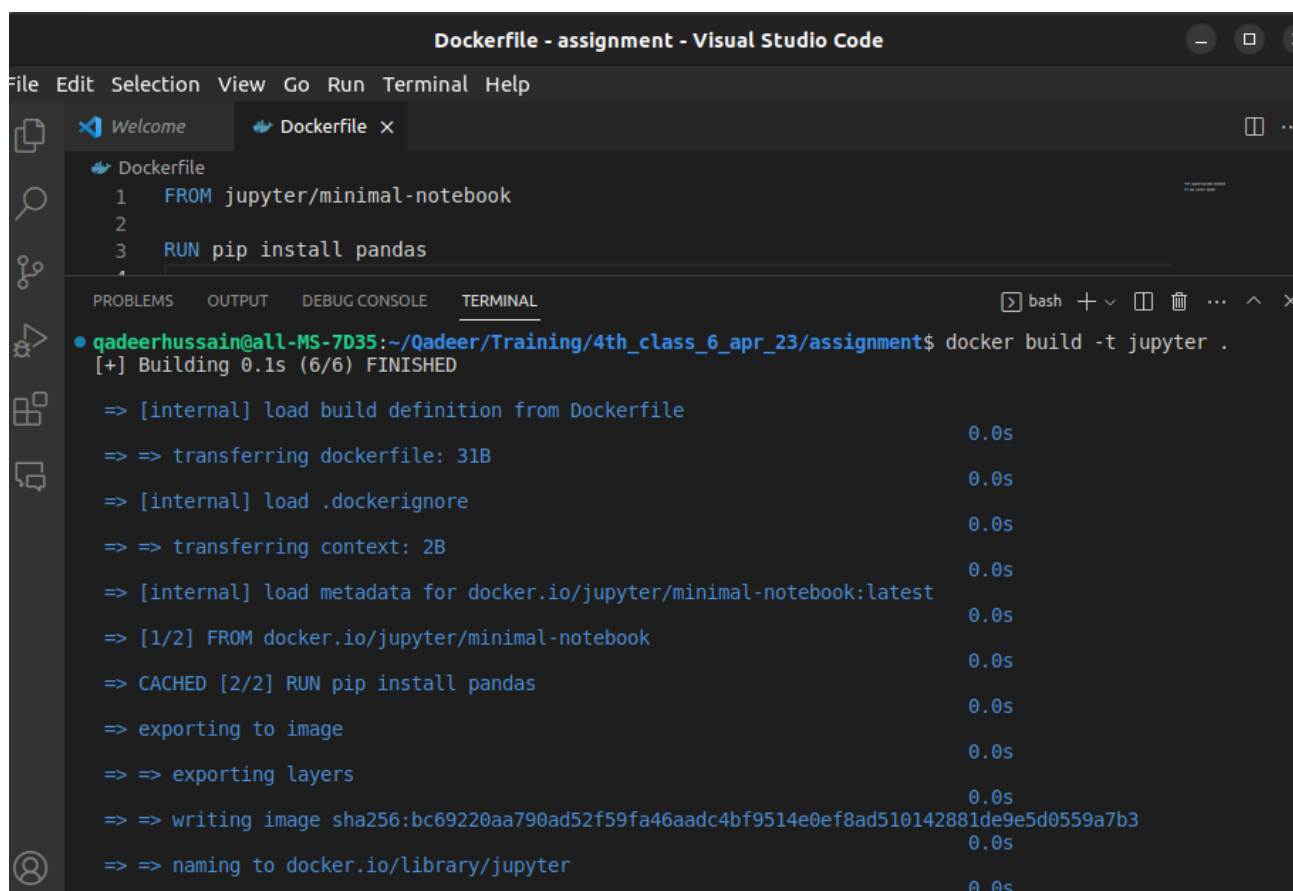
Question:

- Build an image based on Jupyter Notebook (jupyter/minimal-notebook) with Pandas installed (pip install pandas).
- Create a container from this image and use the NOTEBOOK_ARGS=--port=8889 environment variable to change the port Jupyter is exposed on.
- Verify you can access it on port 8889 and that Pandas is installed (type import pandas in a notebook).

Answer:



```
1 FROM jupyter/minimal-notebook
2
3 RUN pip install pandas
4
```



```
Dockerfile - assignment - Visual Studio Code

File Edit Selection View Go Run Terminal Help

Dockerfile
1 FROM jupyter/minimal-notebook
2
3 RUN pip install pandas

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL
qadeerhussain@all-MS-7D35:~/Qadeer/Training/4th_class_6_apr_23/assignment$ docker build -t jupyter .
[+] Building 0.1s (6/6) FINISHED

=> [internal] load build definition from Dockerfile                                0.0s
=> => transferring dockerfile: 31B                                              0.0s
=> [internal] load .dockerignore                                                0.0s
=> => transferring context: 2B                                                  0.0s
=> [internal] load metadata for docker.io/jupyter/minimal-notebook:latest      0.0s
=> [1/2] FROM docker.io/jupyter/minimal-notebook                             0.0s
=> CACHED [2/2] RUN pip install pandas                                         0.0s
=> exporting to image                                                         0.0s
=> => exporting layers                                                         0.0s
=> => writing image sha256:bc69220aa790ad52f59fa46aad4b9514e0ef8ad510142881de9e5d0559a7b3 0.0s
=> => naming to docker.io/library/jupyter                                    0.0s
```

```
=> naming to docker.io/library/jupyter
qadeerhussain@all-MS-7035:~/Qadeer/Training/4th_class_6_apr_23/assignment$ docker run -p 8889:8889 jupyter
Entered start.sh with args: jupyter lab
Executing the command: jupyter lab
[I 2023-04-07 04:25:14.956 ServerApp] Package jupyterlab took 0.0000s to import
[I 2023-04-07 04:25:14.958 ServerApp] Package jupyter_server_fileid took 0.0014s to import
[I 2023-04-07 04:25:14.962 ServerApp] Package jupyter_server_terminals took 0.0035s to import
[I 2023-04-07 04:25:14.987 ServerApp] Package jupyter_server_ydoc took 0.0250s to import
[I 2023-04-07 04:25:14.988 ServerApp] Package nbclassic took 0.0000s to import
[W 2023-04-07 04:25:14.989 ServerApp] A `jupyter_server_extension_points` function was not found in nbclassic. Instead, a `_jupyter_server_extension_paths` function was found and will be used for now. This function will be deprecated in future releases of Jupyter Server.
[I 2023-04-07 04:25:14.991 ServerApp] Package notebook_shim took 0.0001s to import
[W 2023-04-07 04:25:14.991 ServerApp] A `jupyter_server_extension_points` function was not found in notebook_shim. Instead, a `_jupyter_server_extension_paths` function was found and will be used for now. This name will be deprecated in future releases of Jupyter Server.
[I 2023-04-07 04:25:14.997 ServerApp] jupyter_server_fileid | extension was successfully linked.
[I 2023-04-07 04:25:15.002 ServerApp] jupyter_server_terminals | extension was successfully linked.
[I 2023-04-07 04:25:15.008 ServerApp] jupyter_server_ydoc | extension was successfully linked.
[I 2023-04-07 04:25:15.013 ServerApp] jupyterlab | extension was successfully linked.
[W 2023-04-07 04:25:15.016 NotebookApp] 'jp' has moved from NotebookApp to ServerApp. This config will be passed to ServerApp. Be sure to update your config before our next release.
[W 2023-04-07 04:25:15.017 NotebookApp] 'ip' has moved from NotebookApp to ServerApp. This config will be passed to ServerApp. Be sure to update your config before our next release.
[I 2023-04-07 04:25:15.022 ServerApp] nbclassic | extension was successfully linked.
[I 2023-04-07 04:25:15.024 ServerApp] Writing Jupyter server cookie secret to /home/jovyan/.local/share/jupyter/runtime/jupyter_cookie_secret
[I 2023-04-07 04:25:15.278 ServerApp] notebook_shim | extension was successfully linked.
```

