

**Instructions:** Please answer the following questions making sure to write your answers legibly. If you run out of room or need to re-write use the back of this quiz. The graphic denotes the file system on a machine and the Dockerfile in /users/maria.

- Directories are underlined. Any other object should be considered a file.
- **For each question assume that you are starting from the original file system.** Ignore any changes to the file system you made in previous questions.
- You will be graded for being unnecessarily complex in your solutions.
- Any syntax not covered in class will be tested on my machine for applicability.
- **Do not assume a “home” directory location.**

```
/
├── users
│   ├── maria
│   │   ├── Dockerfile
│   │   ├── pyproject.toml
│   │   ├── src
│   │   │   └── test.py
│   │   ├── config
│   │   │   ├── settings.txt
│   │   │   └── params.txt
```

### Dockerfile

```
FROM astral/uv:python3.13-bookworm
WORKDIR /project
COPY pyproject.toml .

RUN uv venv
RUN uv sync

COPY src/test.py .

ENV ENV_A="FirstValue"

CMD ["uv", "run", "python", "test.py"]
```

### test.py

```
import os

if __name__ == '__main__':

    # START SPACE
    env_b = os.environ["ENV_B"]
    print(f"ENV_B: {env_b}")
    # END SPACE

    env_a = os.environ["ENV_A"]
    print(f"ENV_A: {env_a}")
```

1. We run the following commands from the `/users/maria` directory:

```
docker build . -t quiz2
docker run -e ENV_B="SecondValue" quiz2
```

What will be printed to the screen (by the python command) when these commands execute? Write the exact output.

2. We want to copy `settings.txt` from the `config` directory into the container at build time. Add a line to the Dockerfile that will copy this file to `/project/settings.txt` inside the container. Use a relative path and specify where in the Dockerfile this line should be added.
3. The lines labeled “# START SPACE” and “# END SPACE” in `test.py` prints `ENV_B`. Rewrite these lines so that if `VAR2` is not set, it prints “VAR2 is not set”.
4. Which environment variable (`ENV_A` or `ENV_B`) changes only when we build the container?
5. After the container is built using the Dockerfile above, what is the full path where `test.py` is located inside the container?