

**Instructions:** Please answer the following questions making sure to write your answers legibly on the second page. The code below is a segment of a python flask application that we will make changes to.

- Since we are writing python code please be careful about spacing / indent. Leave enough room that it is obvious when you want things indented.
- Make sure to write legibly.

```
from flask import (
    Flask,
    request,
    Response
)

from data_processor import (
    api_status_code,
    api_data_interface
)

app = Flask(__name__)

# WHERE YOUR ANSWER WILL BE

@app.route('/api/v1/data', methods=['GET'])
def return_data_from_api_interface():
    '''
    Main Data route for our flask app
    '''
    text_data = api_data_interface()
    return Response(data, status=200,
                    headers={'Content-type': 'text/html'})

if __name__ == '__main__':
    app.run(host='0.0.0.0', port=5000)
```

We also have the following makefile. Note that the docker image, via a CMD statement starts the flask app as the default command.

```
IMAGE_NAME=flask_app

.PHONY=build run_flask

build:
    docker build . -t $(IMAGE_NAME)

run_flask: build
    docker run $(IMAGE_NAME)
```

1. Our flask server puts logs in the following location `/logs/flask.log`. When there is an error in our log file the phrase `FLASKERROR` appears on the line. Please write make commands (you can ignore modifying the `.PHONY` line) which do the following:
  - (a) Write a make command that returns the last 10 errors from the log (Name it `last_10_errors`).
  - (b) Write a make command that returns the count of the number of lines in the log that have errors (name it `total_errors`).
2. We want to write a route (`/api/v1/status`) which responds to a `GET` request and returns a status code which tells us if the API is working or not. The imported function `api_status_code` returns 0 if the API is down, 1 if the API is broken and 2 if the API is having issues (but still running).
  - Please write a complete route (including all required decorators, etc) that can be placed into the file.
  - It should return status code 200 if the API is working (0)
  - It should return a status code 500 if the API is failing (1)
  - It should return a 503 if the API is having issues (2)
  - Nothing needs to be in the body or headers.
  - No need for comments or doc strings.