

# COMP0085 Summative Assignment

Jan 4, 2023

## Question 1

(a)

(b)

## Question 2

The Python code:

```
src/solutions/q2.py
```

### Question 3

## Appendix 1: constants.py

```
1 import os
2
3 DATA_FOLDER = "data"
4
5 CO2_FILE_PATH = os.path.join(DATA_FOLDER, "co2.txt")
6 IMAGES_FILE_PATH = os.path.join(DATA_FOLDER, "images.jpg")
7
8 OUTPUTS_FOLDER = "outputs"
9
10 DEFAULT_SEED = 0
```

src/constants.py

## Appendix 2: main.py

```
1 import os
2
3 from src.constants import (
4     CO2_FILE_PATH,
5     IMAGES_FILE_PATH,
6     OUTPUTS_FOLDER,
7 )
8 from src.solutions import q2, q3, q4, q5, q6
9
10 if __name__ == "__main__":
11     if not os.path.exists(OUTPUTS_FOLDER):
12         os.makedirs(OUTPUTS_FOLDER)
13
14     # Question 2
15     Q2_OUTPUT_FOLDER = os.path.join(OUTPUTS_FOLDER, "q2")
16     if not os.path.exists(Q2_OUTPUT_FOLDER):
17         os.makedirs(Q2_OUTPUT_FOLDER)
```

main.py