

MEMORANDUM

July 21, 2025

TO: Charlie Refvem
FROM: Jack Toyama

SUBJECT: Homework oxoo – Reading CSV Files and Using matplotlib





```
line: 6 skipped for having < 2 readable values. Line content:  
line: 7 skipped for having < 2 readable values. Line content: # 0.0 0.0 0.0, 0.0  
line: 8 skipped for having < 2 readable values. Line content:  
line: 12 skipped for having < 2 readable values. Line content: waffles!!!
```



Plot2.py

```
import csv  
from pathlib import Path  
import matplotlib.pyplot as plt  
  
def read_csv(filepath):  
    # Initialize line number and output list  
    cur_line = 1  
    rows = []  
    # Open file  
    with open(filepath, "r") as f:  
        # Grab header  
        header = f.readline()  
        header = header.strip("\n")  
        header = header.split(",")  
        if len(header) < 2:  
            print("header has less than 2 values")  
            return None  
        # For each line  
        for line in f:  
            # Increment line number  
            cur_line += 1  
            # Strip newline and comments, then split into list  
            raw_row = line.strip("\n")  
  
            raw_row = raw_row.split("#", 1)[0]  
            raw_row = raw_row.split(",")  
            # Skip if less than 2 values or a value cannot be converted to a  
float  
            if len(raw_row) < 2:  
                print(f"line: {cur_line} skipped for having < 2 readable  
values. Line content: {line}")  
                continue  
            try:
```



```
        raw_row = [float(val) for val in raw_row]
    except ValueError:
        print(f"line: {cur_line} skipped for having invalid value")
        continue
    rows.append(raw_row)
return header, rows

# Set Path
csv_path = "data.csv"
# Run csv function
header, rows = read_csv(csv_path)
x, y = zip(*rows)

# Create plot
plt.scatter(x, y)
plt.xlabel(header[0])
plt.ylabel(header[1])
plt.grid(True)
plt.show()
```

Sources: [W3Schools.com](https://www.w3schools.com/python/) for function definitions and matplotlib information