1. Take an integer n as input (0<=n<=9) and print the following pattern with numbers

Example:

n=5

```
        1
      1 2
    1 2 3
  1 2 3 4
1 2 3 4 5
```

n=7

```
          1
        1 2
      1 2 3
    1 2 3 4
  1 2 3 4 5
1 2 3 4 5 6
1 2 3 4 5 6 7
```

2. Make a Double Ended Queue class with the following functionalities. Add codes to test the functionalities too.

A) PUSH FRONT: Insert an element at the beginning of the queue.

B) PUSH BACK: Insert an element at the end of the queue.

C) POP FRONT: Remove the first element.

D) POP BACK: Remove the last element.

E) FRONT: Return/print the first element.

F) BACK: Return/print the last element.

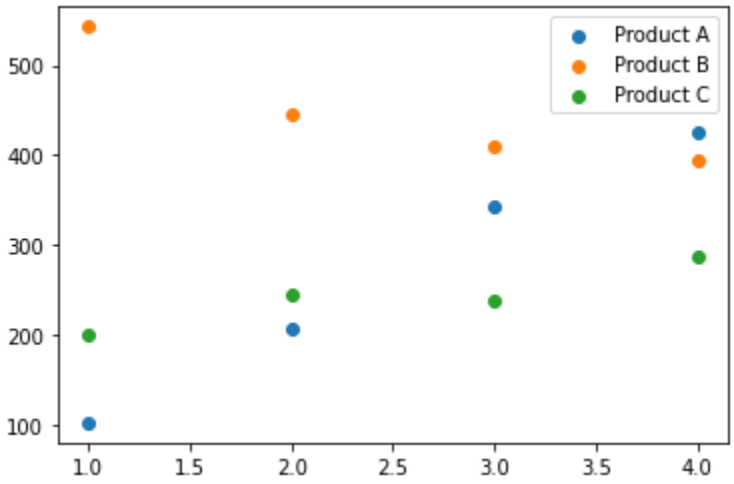
Example:

Input.txt	Actions by your program:
B 10	Inserts 10
A 21	Inserts 21 at front
B 13	Inserts 13 at back
F	Prints 13
C	Removes 21 from front
E	Prints 10

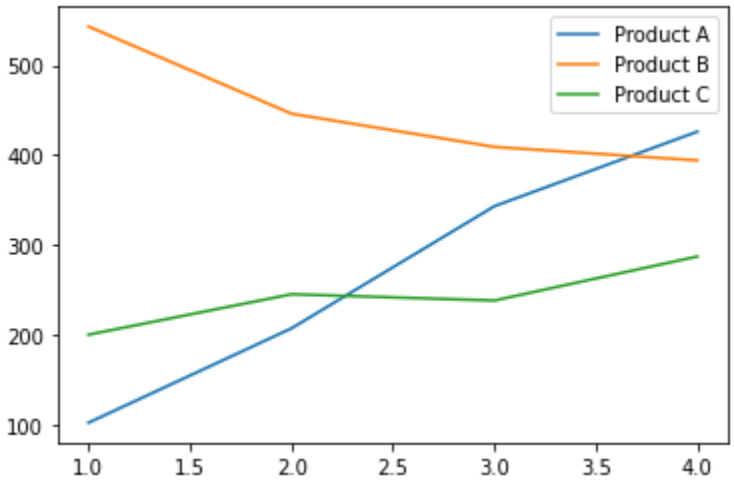
3. Given sales data in csv format (SalesData.csv), output scatter plot and line plots as shown below.

Day	Product A	Product B	Product C
1	102	543	200
2	207	446	245
3	343	409	238
4	426	394	287

Scatter Plot:



Line Plot:



Instructions:

1. **Code each problem in separate python files. (problem1.py, problem2.py etc.)**
2. **Create a folder. Rename it with your student ID.**
3. **Put all your python files into the folder.**
4. **ZIP the folder and upload to LMS submission window.**
5. **Deadline: Saturday 11:55 PM.**
6. **Do not copy! Copy checker will be used during evaluation. Negative marking is possible.**