1. Write a python program that prints the following pattern given an odd number.

Example: n=5.

```
  *
 ***
*****
 ***
  *
```

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.

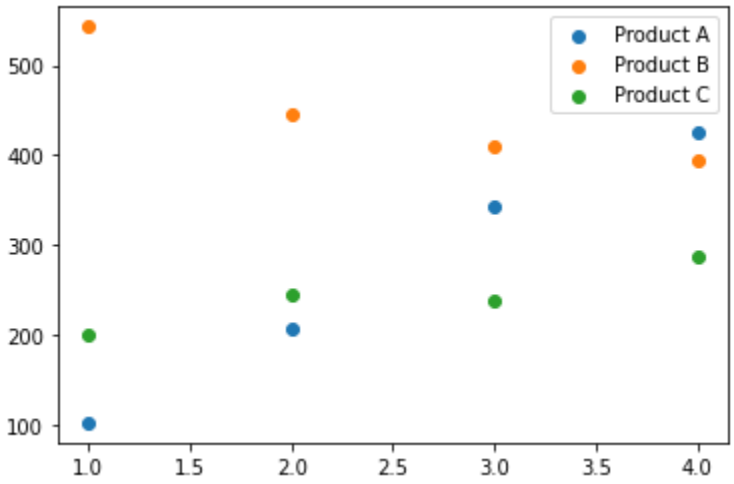
Example:

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

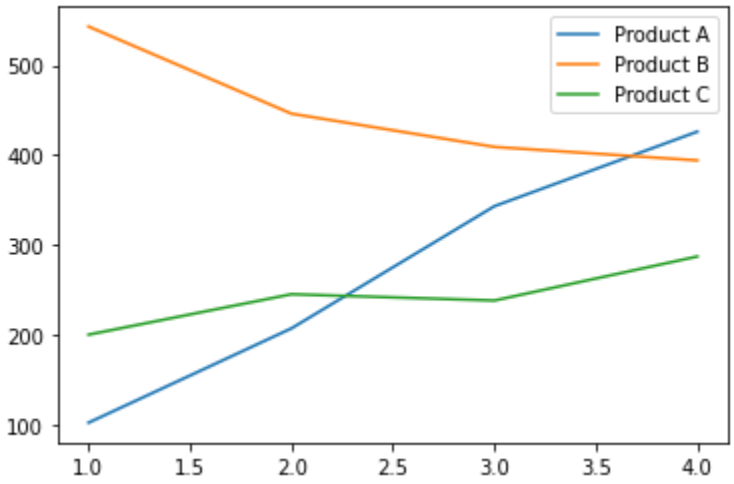
3. Given sales data in csv format (SalesData.csv), output scatter plot and line plots as shown below.

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.p 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: Wednesday 11:55 PM.**
6. **Do not copy! Copy checker will be used during evaluation. Negative marking is possible.**