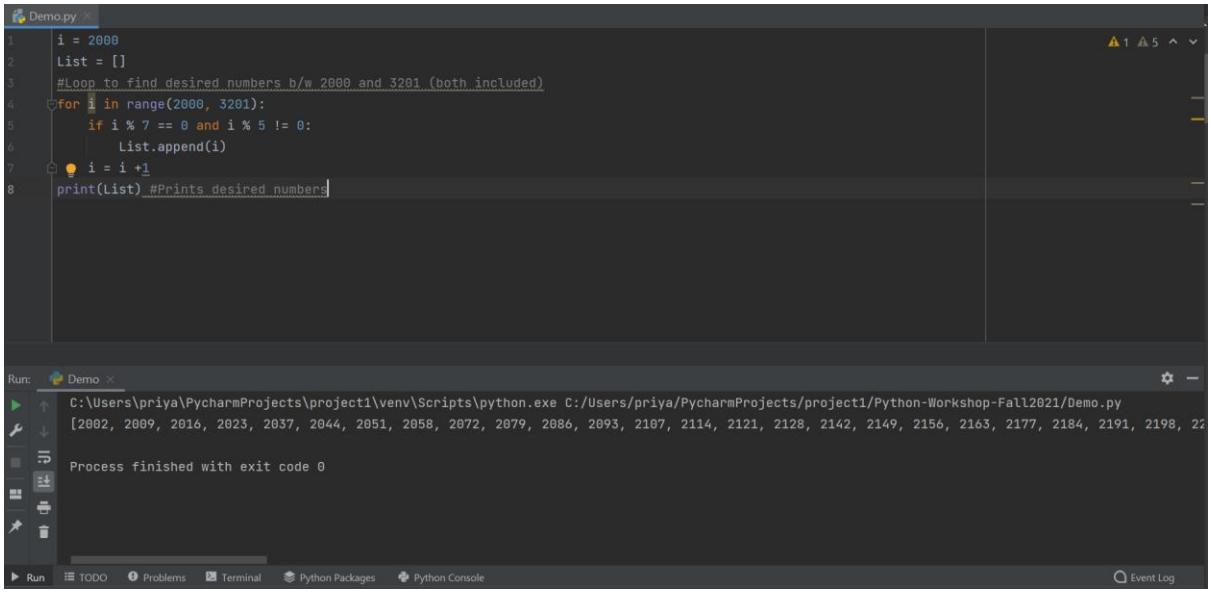
Computing and Simulation for Autonomy, Fall 2021

Homework-2 Programming Exercises – Python

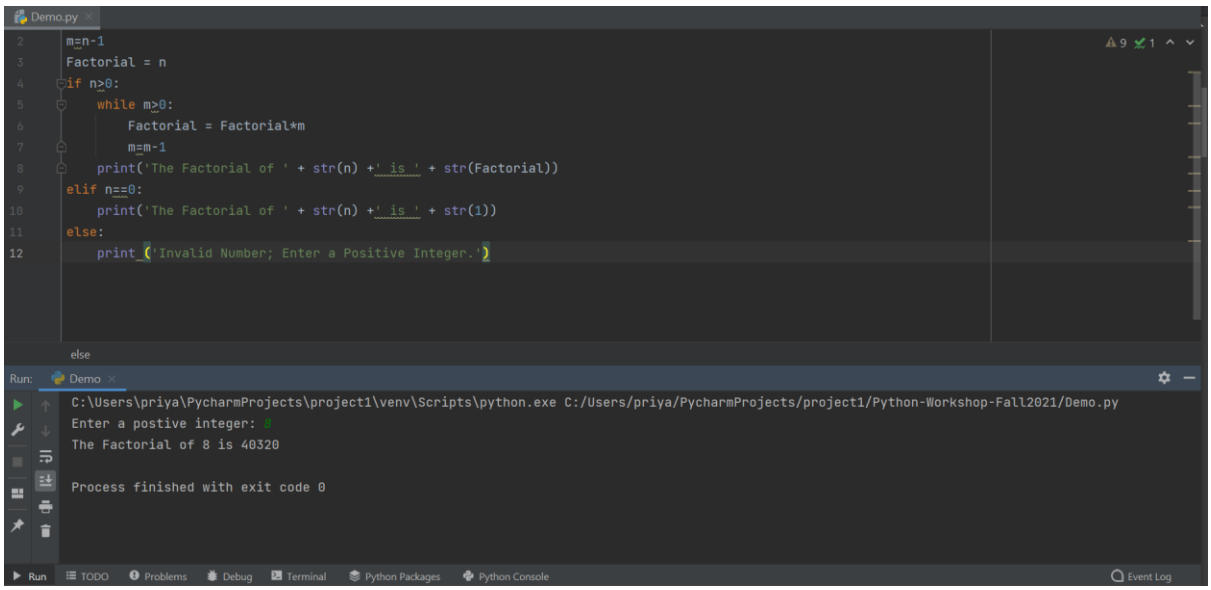
-Priyanshu Rawat

Here is the GitHub link with all the codes:
https://github.com/priyanshurawat1509/homework_2/blob/5e8907639d843a849fc72dcb9497b6779c422592/homework2.py

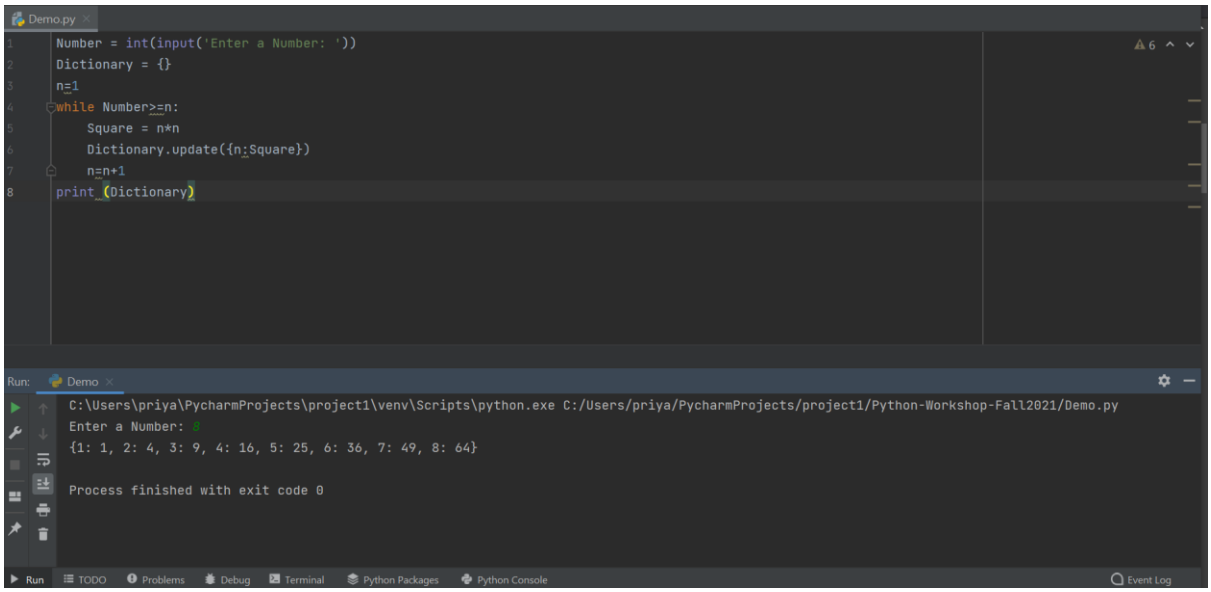
Question 1)



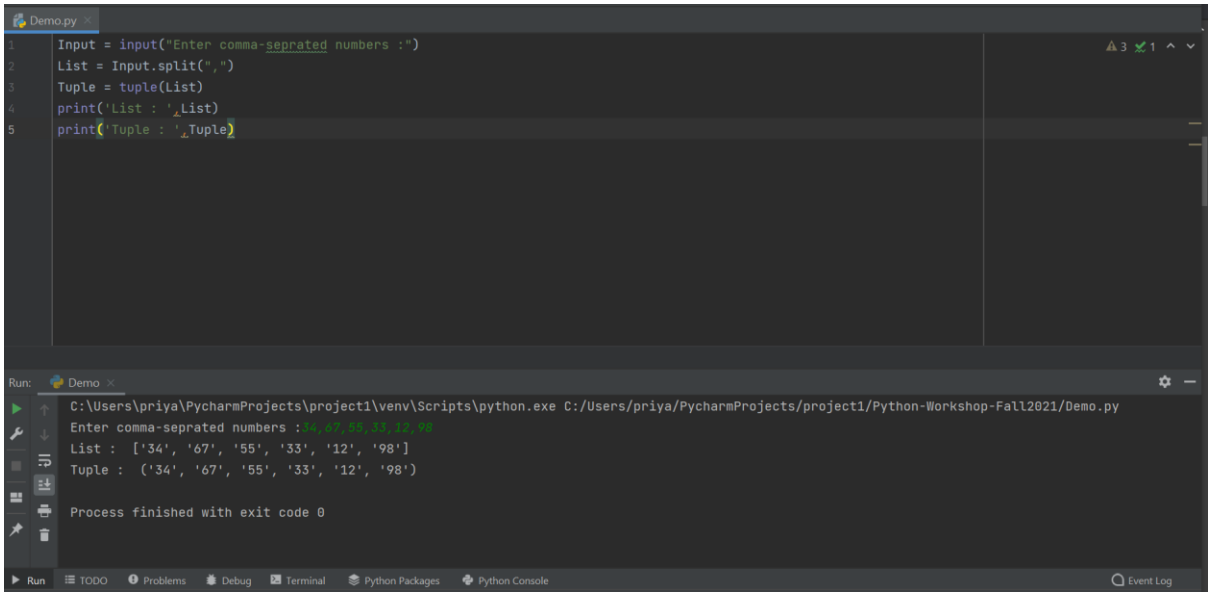
Question 2)



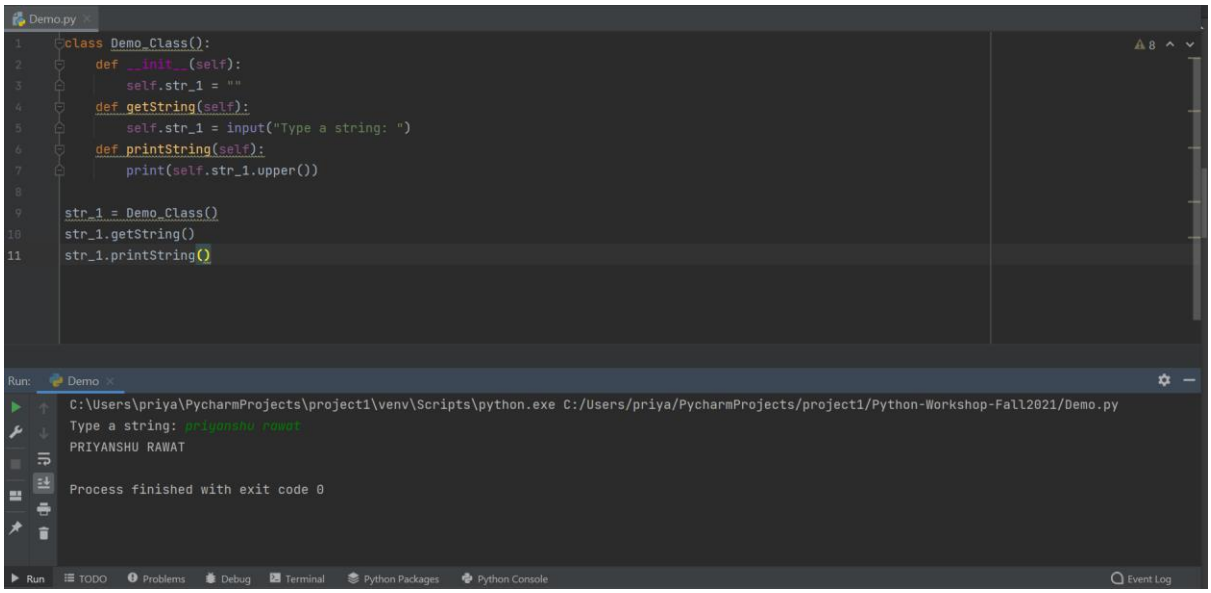
Question 3)



Question 4)

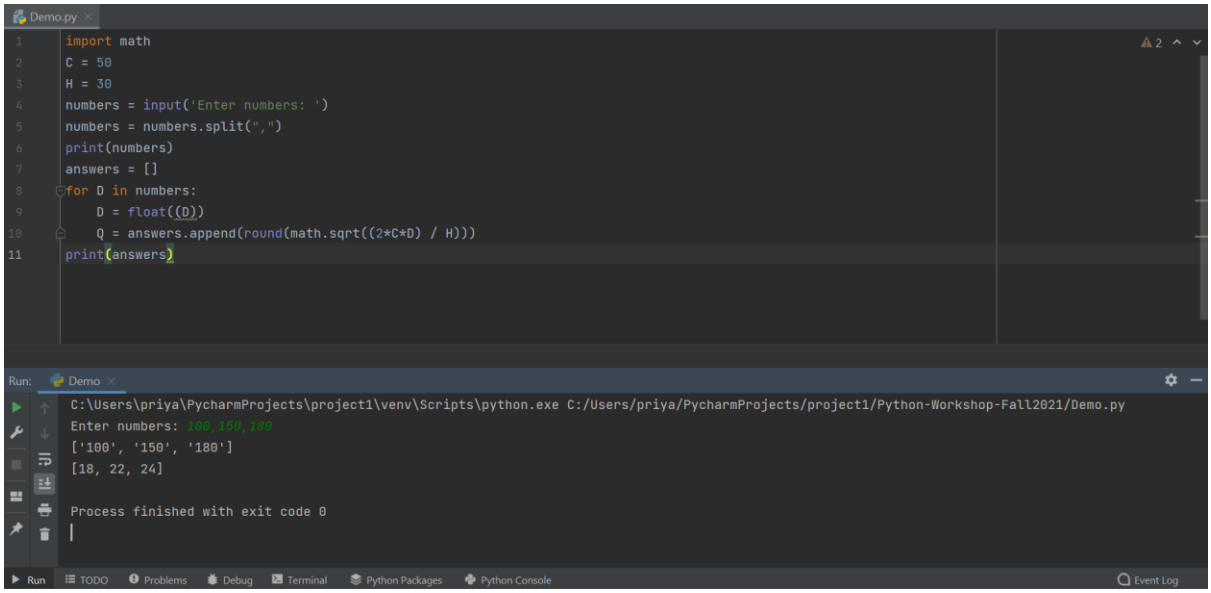


Question 5)



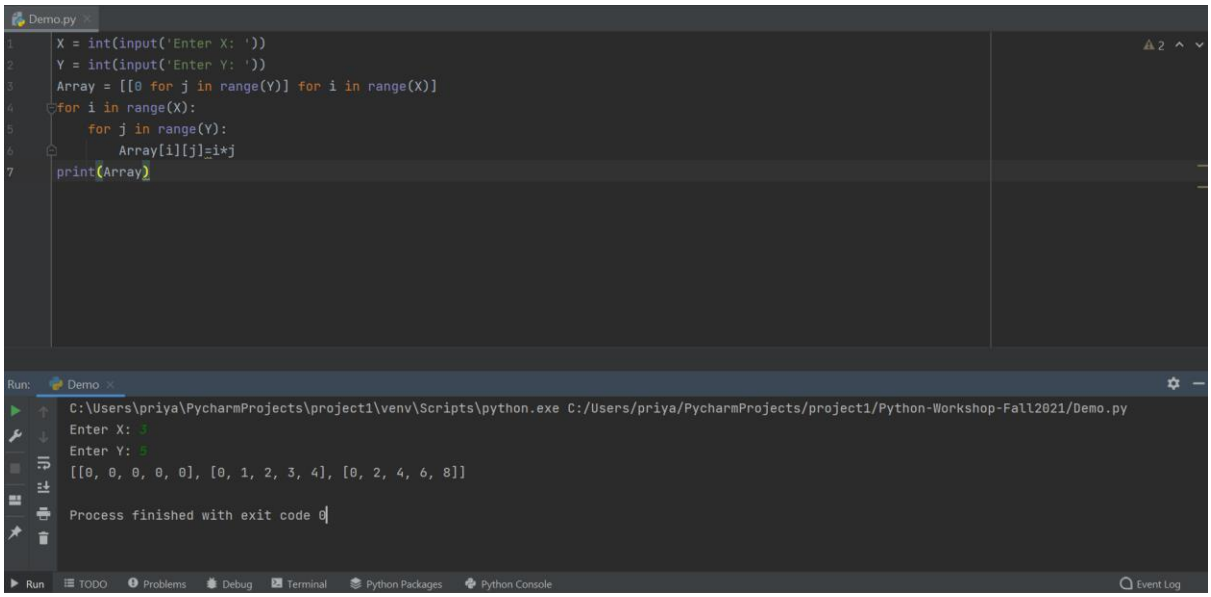
```
Demo.py
class Demo_Class():
    def __init__(self):
        self.str_1 = ""
    def getString(self):
        self.str_1 = input("Type a string: ")
    def printString(self):
        print(self.str_1.upper())

str_1 = Demo_Class()
str_1.getString()
str_1.printString()

Run: Demo
C:\Users\priya\PycharmProjects\project1\venv\Scripts\python.exe C:/Users/priya/PycharmProjects/project1/Python-Workshop-Fall2021/Demo.py
Type a string: priyanshu rawat
PRIYANSHU RAWAT

Process finished with exit code 0
```

Question 6)

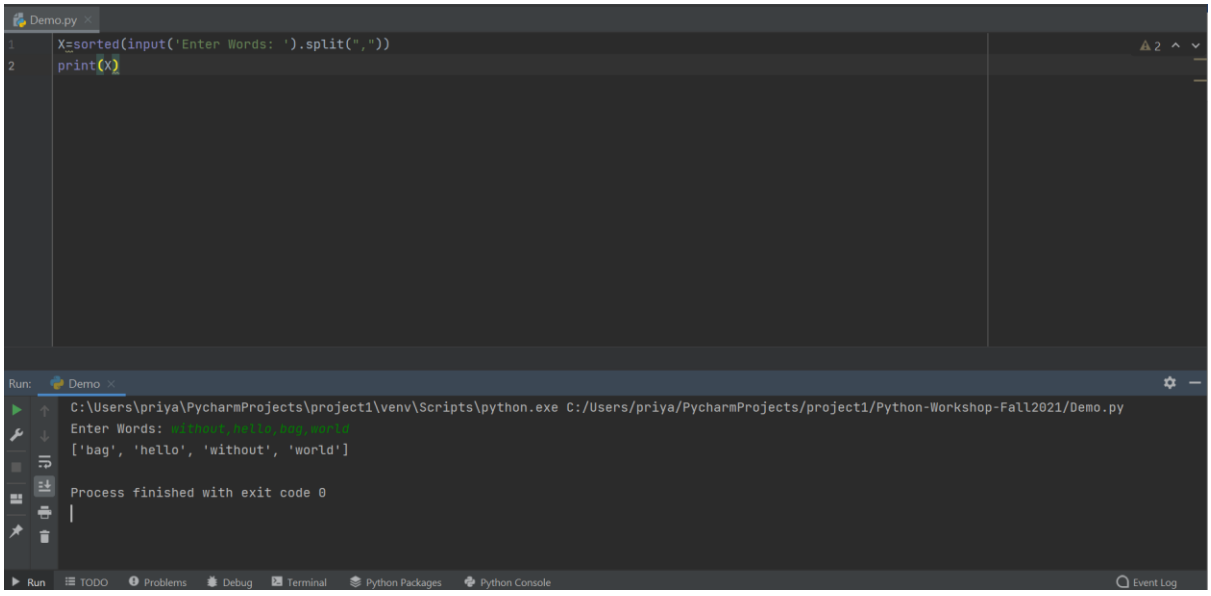


```
Demo.py
import math
C = 50
H = 30
numbers = input('Enter numbers: ')
numbers = numbers.split(",")
print(numbers)
answers = []
for D in numbers:
    D = float(D)
    Q = answers.append(round(math.sqrt((2*C*D) / H)))
print(answers)

Run: Demo
C:\Users\priya\PycharmProjects\project1\venv\Scripts\python.exe C:/Users/priya/PycharmProjects/project1/Python-Workshop-Fall2021/Demo.py
Enter numbers: 100,150,180
['100', '150', '180']
[18, 22, 24]

Process finished with exit code 0
```

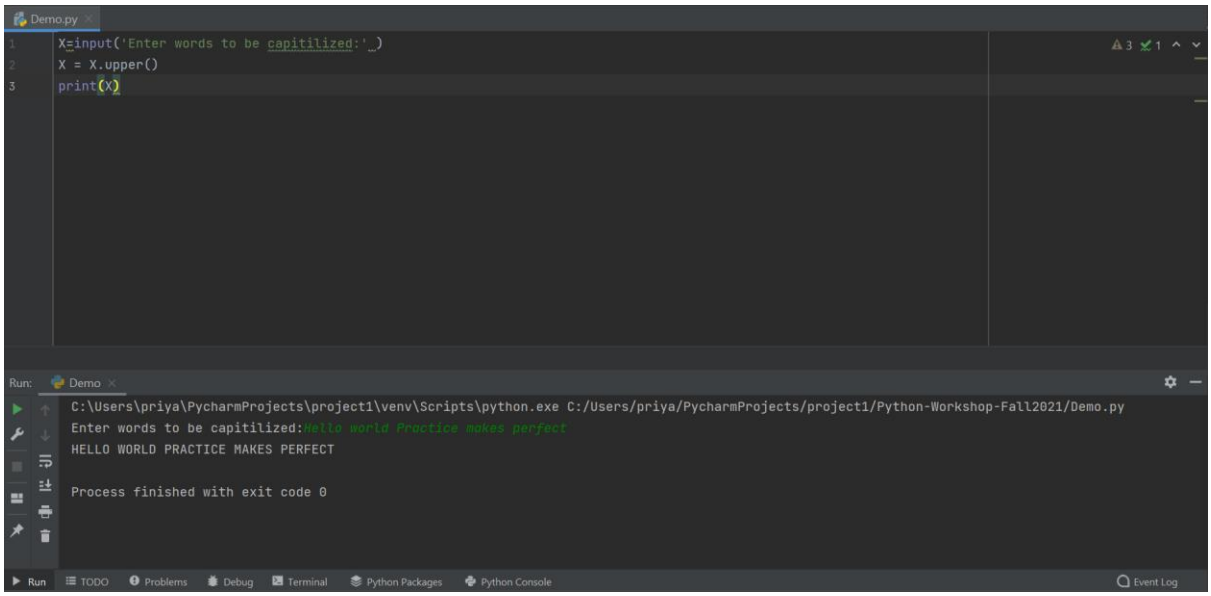
Question 7)



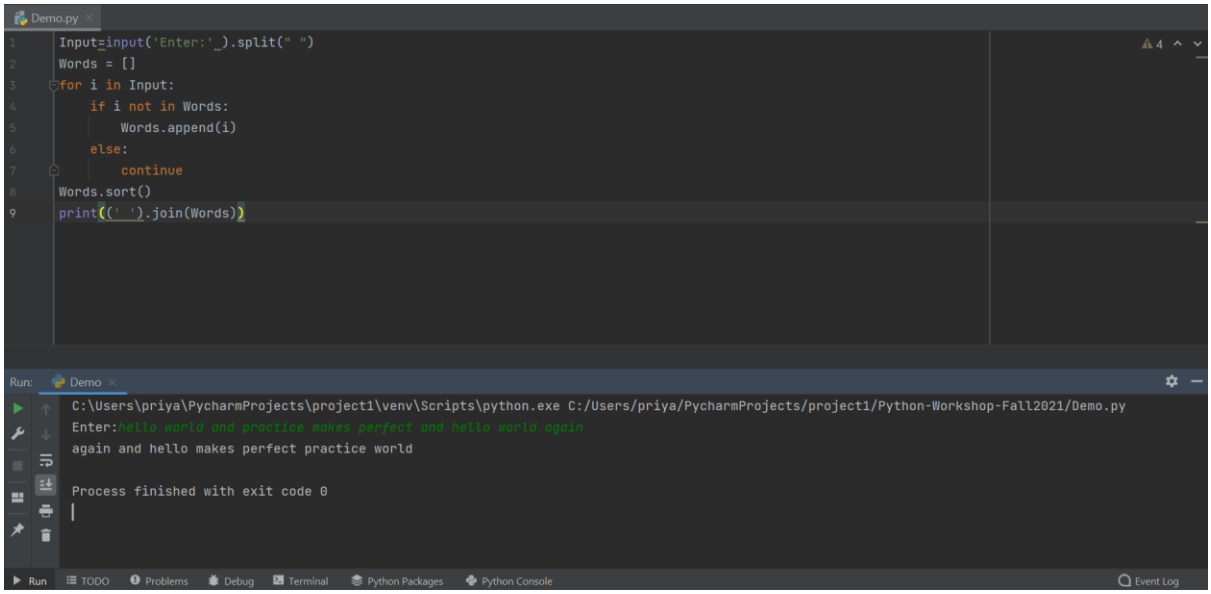
Question 8)



Question 9)



Question 10)



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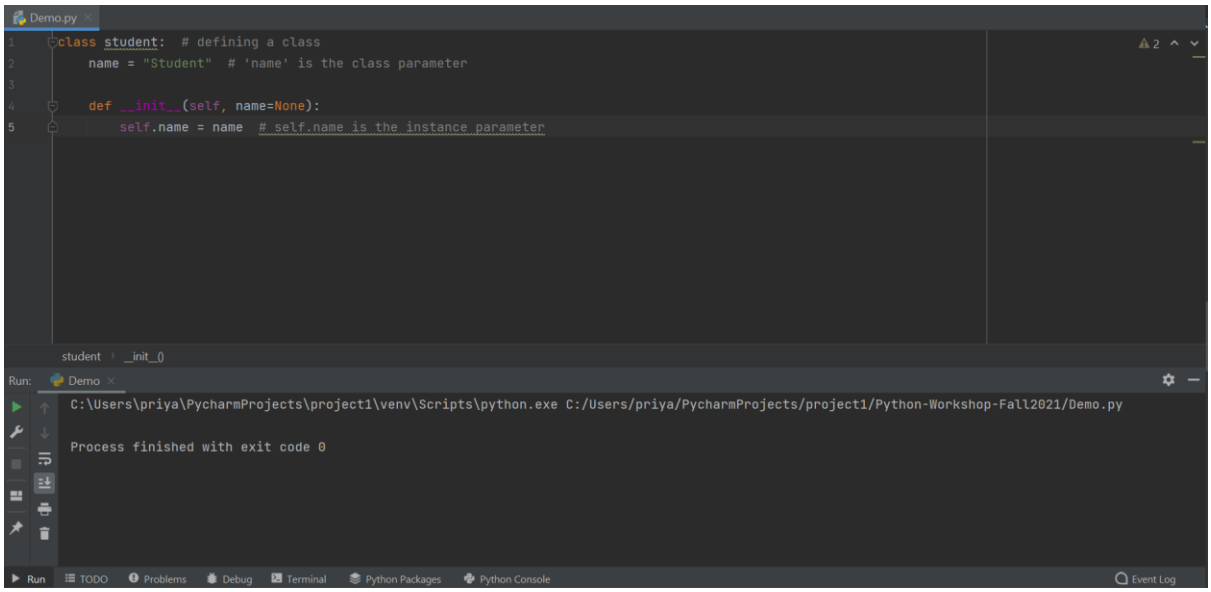

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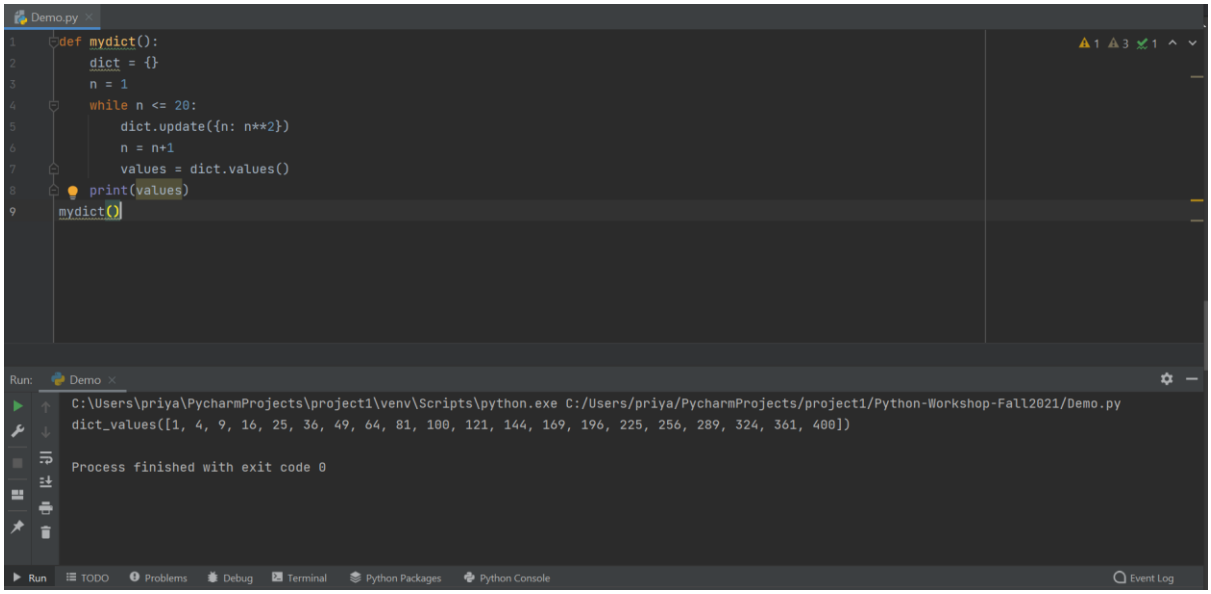

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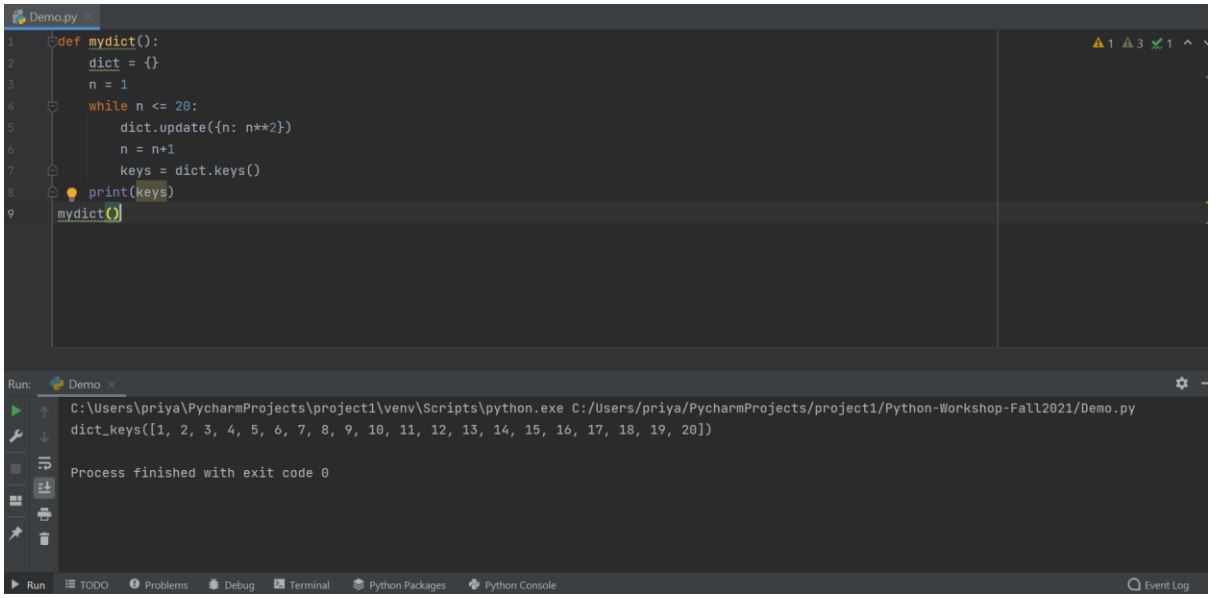

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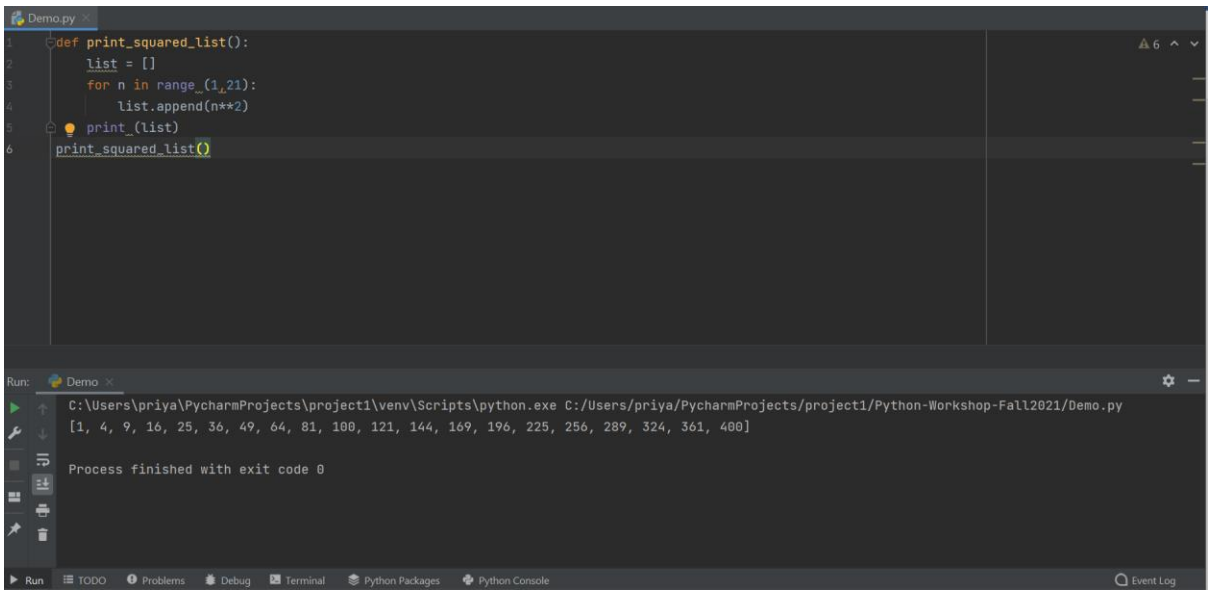

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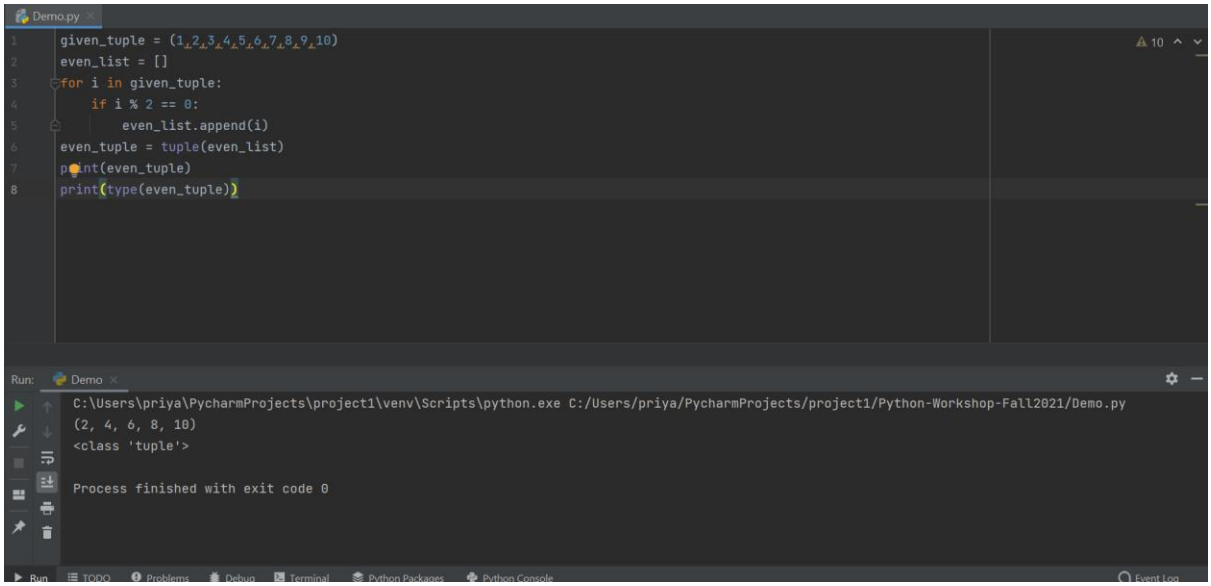

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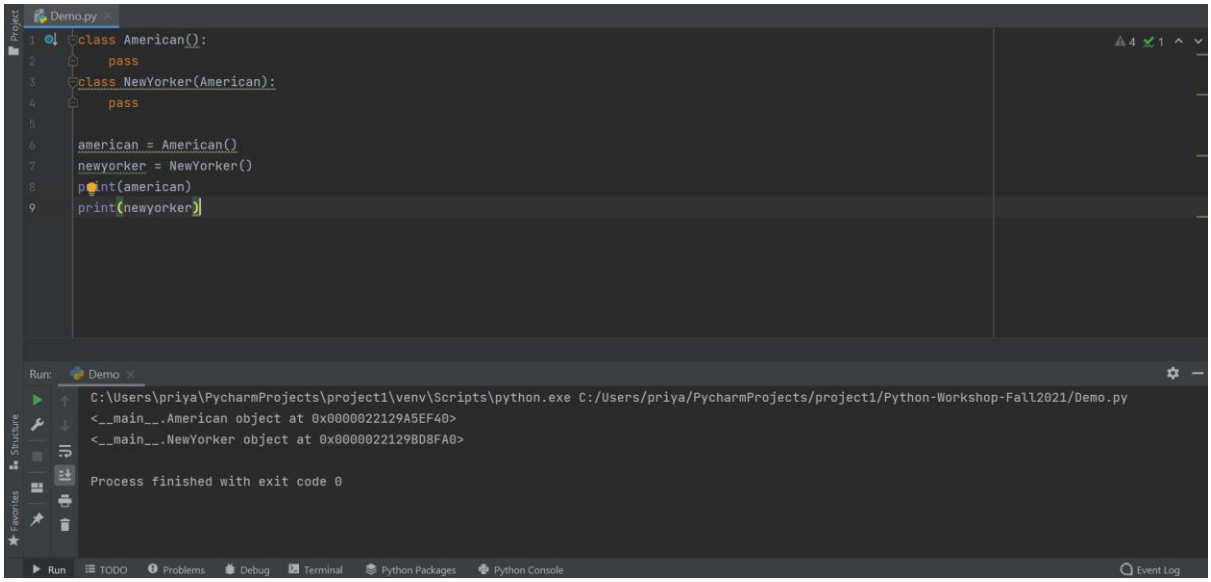
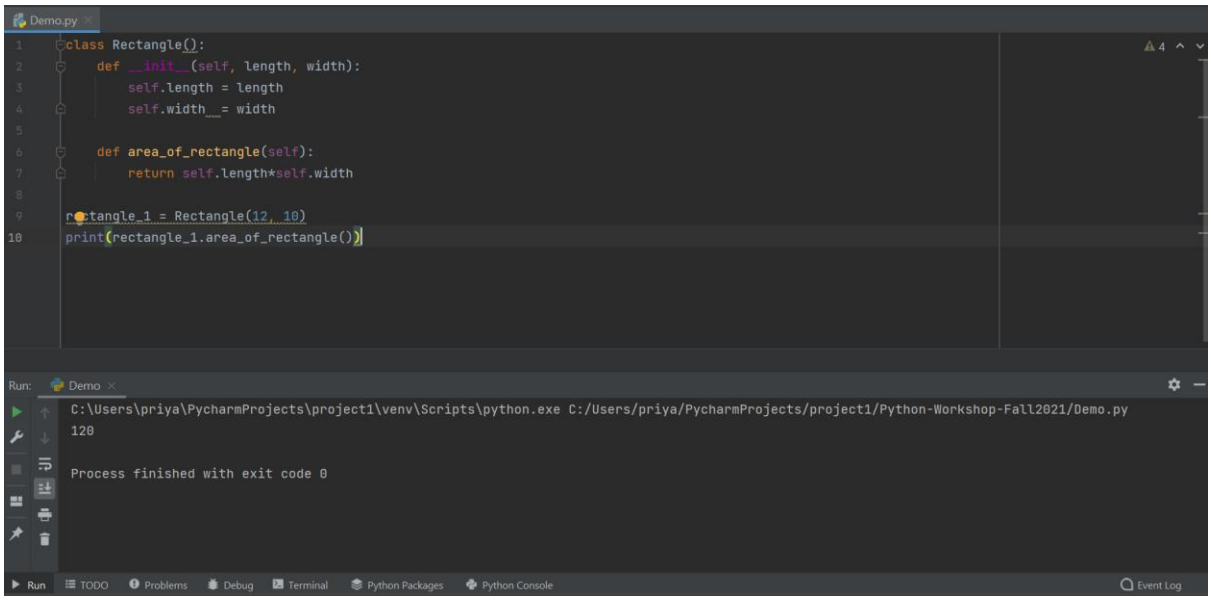


Question 53)



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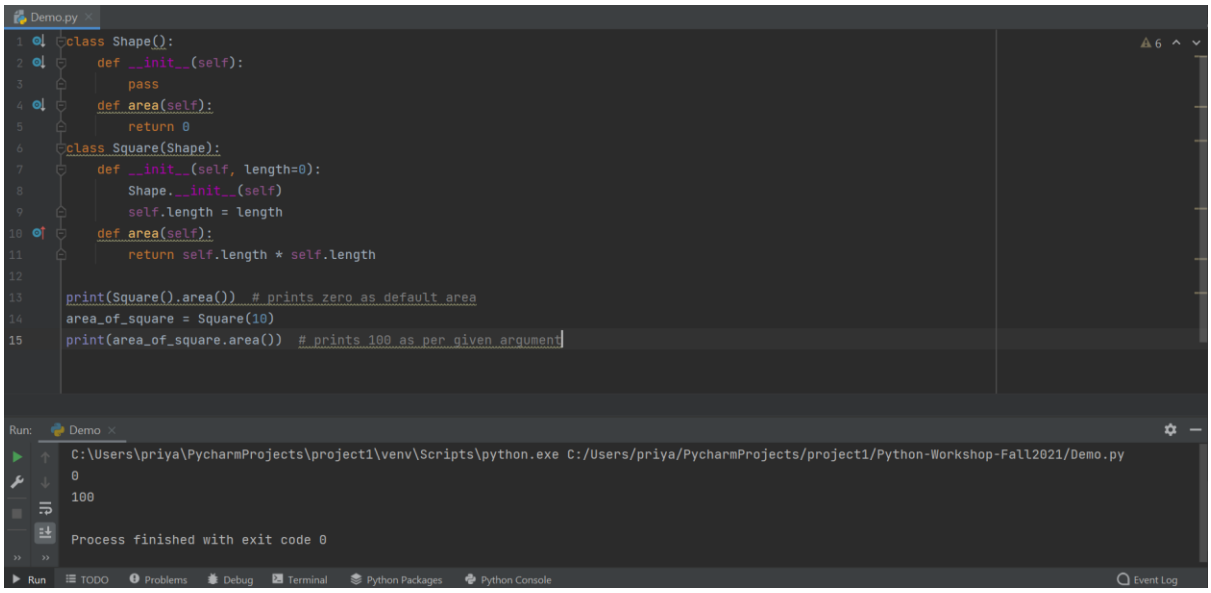

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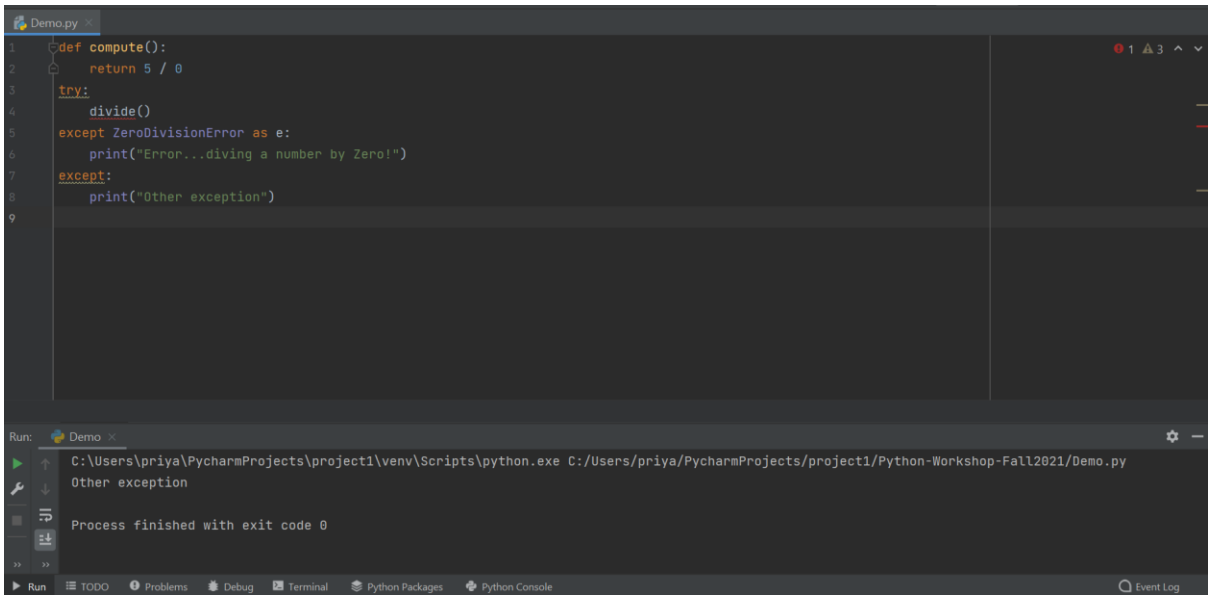

Question 94)