**Lab Test 1**

**Open Source Software Lab**

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B11

Q1. a

L1 = []

L2 = []

n = int(input("No of Elements in L1: "))

print("input elements one by one for l1")

for i in range(0, n):

    each\_elemets = int(input())

    L1.append(each\_elemets)

m = int(input("No of Elements in L2 : "))

print("input elements one by one for l1")

for i in range(0, m):

    each\_elemets = int(input())

    L2.append(each\_elemets)

L = []

i = 0

j = 0

lx1 = []

lx2 = []

while(i < n):

    if(L1[i] % 2 != 0):

        lx1.append(L1[i])

    i = i+1

i = 0

while(i < m):

    if(L2[i] % 2 == 0):

        lx2.append(L2[i])

    i = i+1

i = 0

j = 0

while(i < len(lx1) and j < len(lx2)):

    L.append(lx1[i])

    L.append(lx2[j])

    i = i+1

    j = j+1

while(i < len(lx1)):

    L.append(lx1[i])

    i = i+1

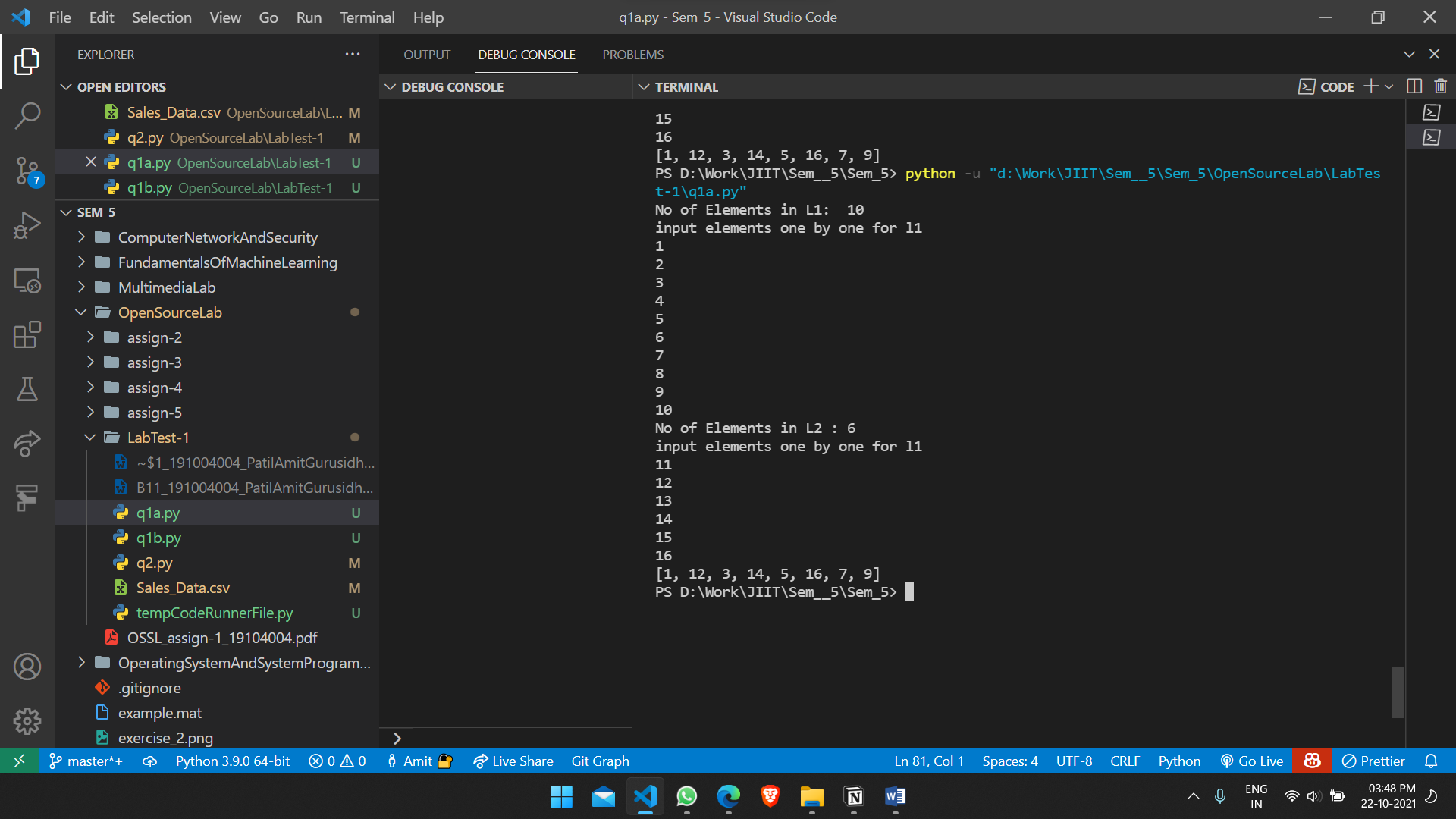
while(j < len(lx2)):

    L.append(lx2[j])

    j = j+1

print(L)

Output



Q1b

Q2

import pandas as pd

from matplotlib import pyplot as plt

# Read data

data = pd.read\_csv(

    'D:\Work\JIIT\Sem\_\_5\Sem\_5\OpenSourceLab\LabTest-1\Sales\_Data.csv')

month = data['Month']

Product\_A = data['Product A']

Product\_B = data['Product B']

Product\_C = data['Product C']

Product\_D = data['Product D']

Product\_E = data['Product E']

Product\_F = data['Product F']

m = []

prod\_a\_list = []

prod\_b\_list = []

prod\_c\_list = []

prod\_d\_list = []

prod\_e\_list = []

prod\_f\_list = []

for item1 in month:

    m.append(item1)

for item2 in Product\_A:

    prod\_a\_list.append(item2)

for item2 in Product\_B:

    prod\_b\_list.append(item2)

for item2 in Product\_C:

    prod\_c\_list.append(item2)

for item2 in Product\_D:

    prod\_d\_list.append(item2)

for item2 in Product\_E:

    prod\_e\_list.append(item2)

for item2 in Product\_F:

    prod\_f\_list.append(item2)

fig, ax = plt.subplots()

# Plot Multiline graph

ax.plot(m, prod\_a\_list, label='Product A')

ax.plot(m, prod\_b\_list, label='Product B')

ax.plot(m, prod\_c\_list, label='Product C')

ax.plot(m, prod\_d\_list, label='Product D')

ax.plot(m, prod\_e\_list, label='Product E')

ax.plot(m, prod\_f\_list, label='Product F')

ax.legend()

ax.set\_title('Product Sales per Month')

ax.set\_xlabel('Month')

ax.set\_ylabel('Sales')

plt.show()

Output

