**Lab 3**

Q1.  
  
def multiply\_all\_numbers(list):

m=1

for i in list:

if i == 0:

return 0

m = m \* i

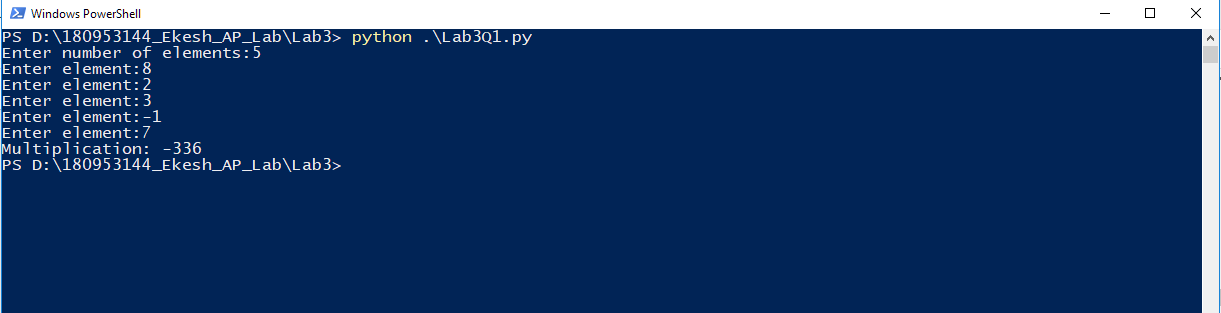
return m

n=int(input("Enter number of elements:"))

list = []

for i in range(n):

list.append(int(input("Enter element:")))

print("Multiplication:",multiply\_all\_numbers(list))  
  
**Sample Input Output :**  
  
  
  
  
  
Enter number of elements:5

Enter element:8

Enter element:2

Enter element:3

Enter element:-1

Enter element:7

Multiplication: -336  
  
  
Q2.   
  
def unique(list):

uniquelist = []

for i in list:

if i not in uniquelist:

uniquelist.append(i)

return uniquelist

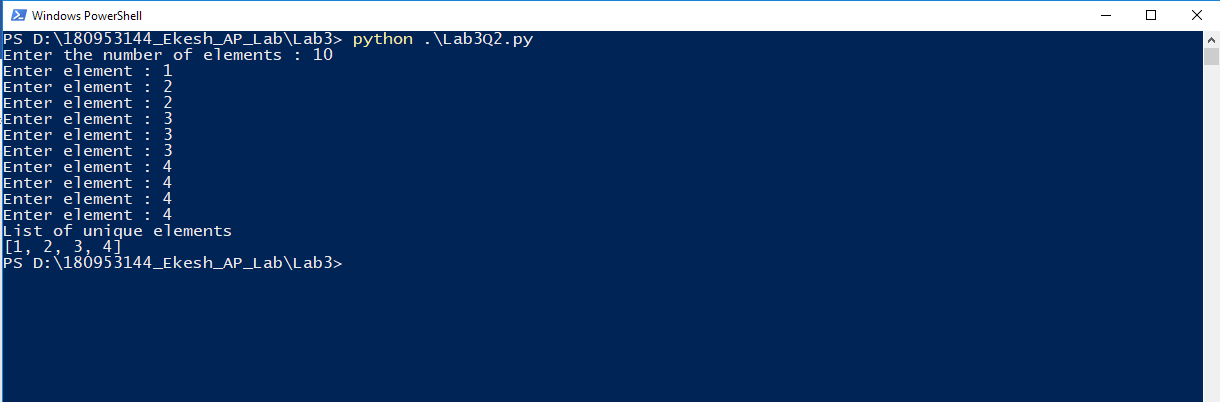
n = int(input("Enter the number of elements : "))

list = []

for i in range(n):

list.append(int(input("Enter element : ")))

print("List of unique elements")

print(unique(list))  
  
  
**Sample Input Output :**  
  
  
  
  
Enter the number of elements : 10

Enter element : 1

Enter element : 2

Enter element : 2

Enter element : 3

Enter element : 3

Enter element : 3

Enter element : 4

Enter element : 4

Enter element : 4

Enter element : 4

List of unique elements

[1, 2, 3, 4]  
  
  
  
  
**Lab 4**

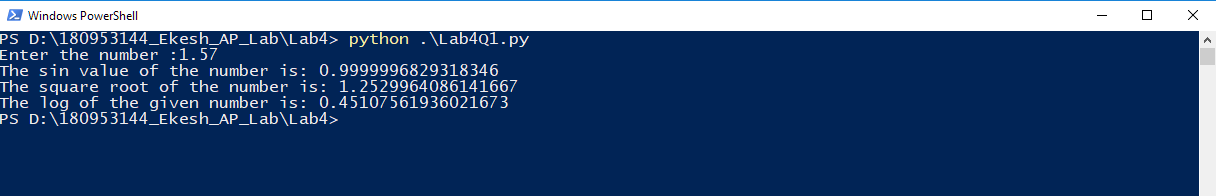
Q1.

import math

n = float(input("Enter the number :"))

print("The sin value of the number is: " + str(math.sin(n)))

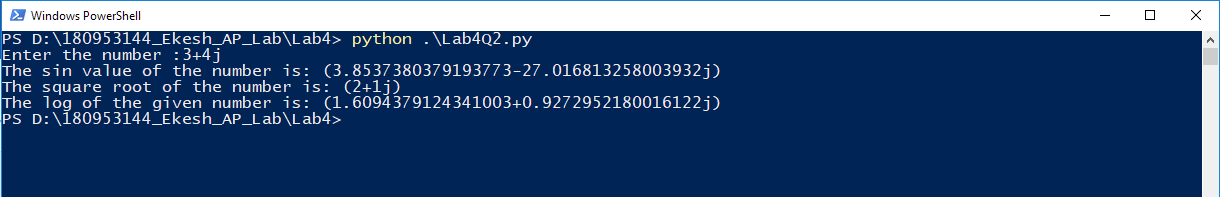
print("The square root of the number is: " + str(math.sqrt(n)))

print("The log of the given number is: " + str(math.log(n)))  
  
**Sample Input Output :**  
  
  
  
  
Q2.  
  
import cmath

n = complex(input("Enter the number :"))

print("The sin value of the number is: " + str(cmath.sin(n)))

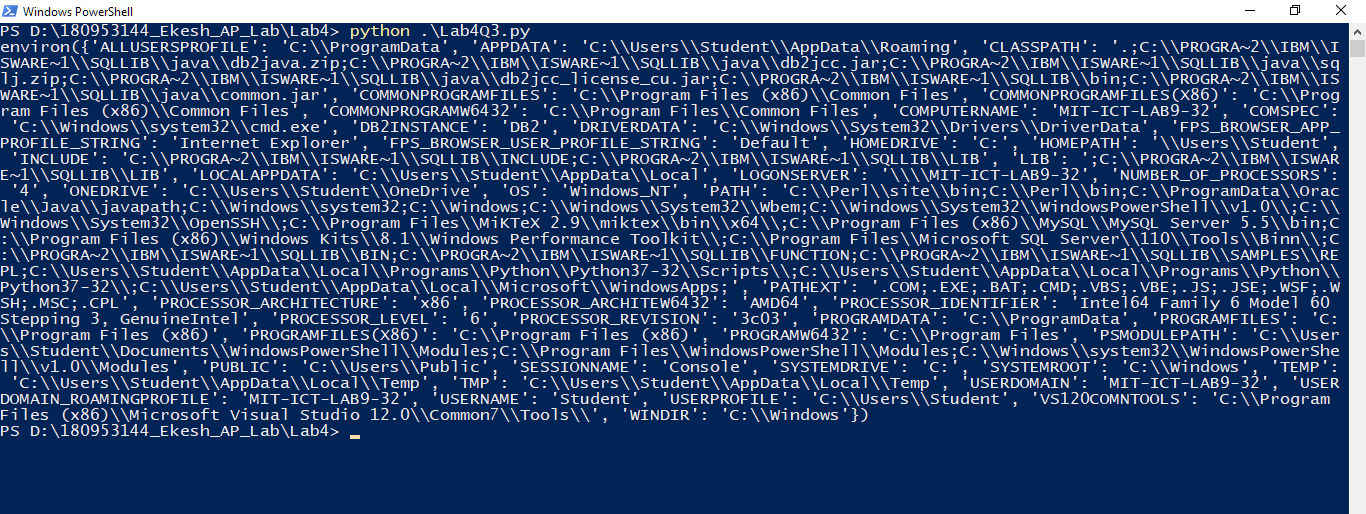
print("The square root of the number is: " + str(cmath.sqrt(n)))

print("The log of the given number is: " + str(cmath.log(n)))  
  
**Sample Input Output :**  
  


Q3.

import os

print(os.environ)  
  
**Sample Input Output :**



**Lab 5**

Q1.  
  
 def readData():

e\_id = int(input("Enter Employee ID:"))

e\_name = input("Enter Employee name:")

e\_salary = int(input("Enter Employee salary:"))

e\_department = input("Enter Employee department:")

return (e\_id, e\_name, e\_salary, e\_department)

def searchTuples(id, key):

for x in id:

if key in x:

print("Employee Found:",x)

return

print("Employee Not Found")

n = int(input("Number of employees you want to enter:"))

list = []

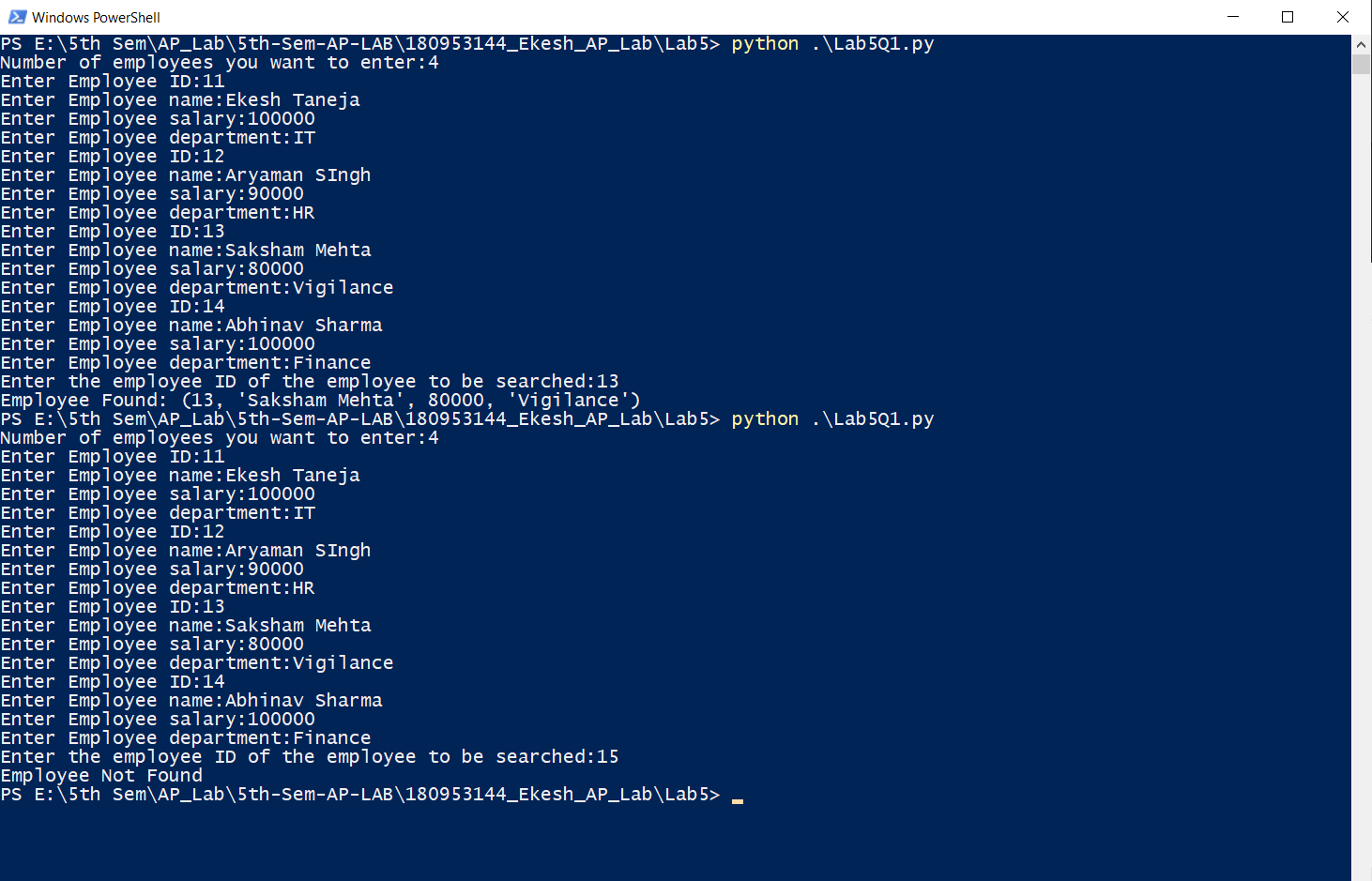
for i in range(n):

a = readData()

list.append(a)

searchkey = int(input("Enter the employee ID of the employee to be searched:"))

searchTuples(l, searchkey)  
  
**Sample Input Output :**



Q2.  
  
class UniqueSubset:

def setinput(self,s):

return self.setsubset([],sorted(s))

def setsubset(self,currentset,sorteds):

if sorteds:

return self.setsubset(currentset,sorteds[1:])+self.setsubset(currentset+[sorteds[0]],sorteds[1:])

return [currentset]

uss=UniqueSubset()

print("Unique Subsets are:",uss.setinput([1,2,3,4,5]))  
  
**Sample Input Output :**  
  
