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Information Security

Lab Task 2a

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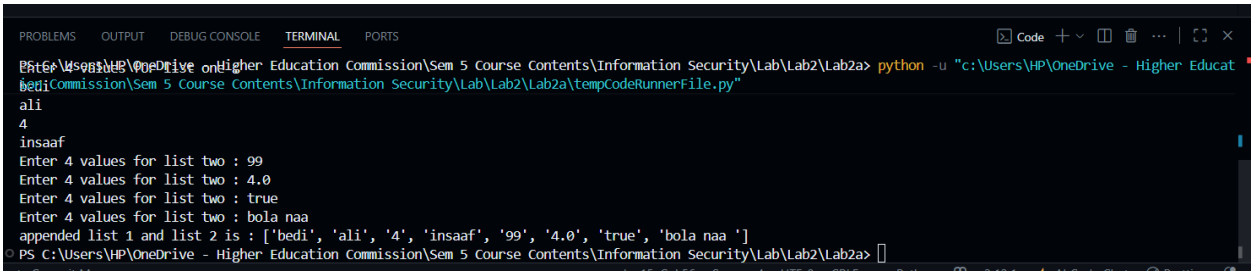
Activity 1 Accept two lists from user and display their join.

```
print("Enter 4 values for list one : ")

list1=[]

for i in range(0,4):
    list1.append((input()))


list2=[]

for i in range(0,4):
    list2.append((input("Enter 4 values for list two : ")))


print(f"appended list 1 and list 2 is : {list1+list2}")
```

Output:



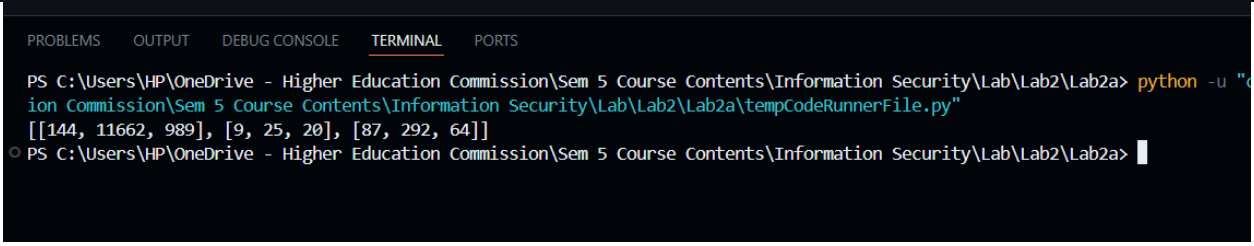
Activity 2: A palindrome is a string which is same read forward or backwards. For example: "dad" is the same in forward or reverse direction. Another example is "aibohphobia" which literally means, an irritable fear of palindromes. Write a function in python that receives a string and returns True if that string is a palindrome and False otherwise. Remember that difference between upper and lower case characters are ignored during this determination.

```
def palindrome(word):
    return word == word[::-1]


print(palindrome("madam"))
```

Activity 3:

magine two matrices given in the form of 2D lists as under; a = [[1, 0, 0], [0, 1, 0], [0, 0, 1]] b = [[1, 2, 3], [4, 5, 6], [7, 8, 9]] Write a python code that finds another matrix/2D list that is a product of and b, i.e., C=a*b

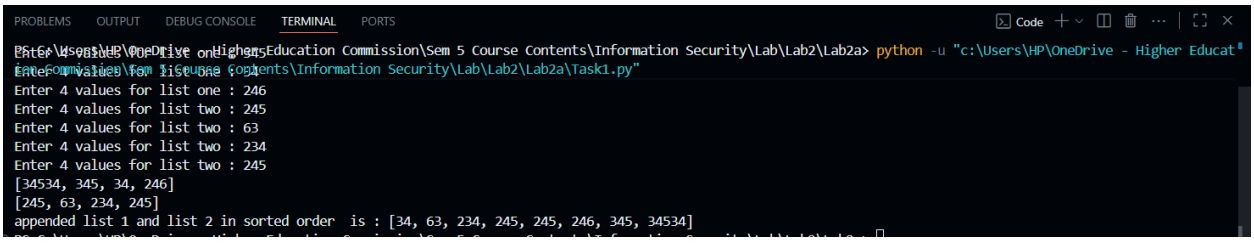
```
list1=[[12,34,23],
       [3,5,4],
       [87,73,32]]

list2=[[12,343,43],
       [3,5,5],
       [1,4,2]]


list3=[[],[],[]]


for i in range(len(list1)):
    for j in range(len(list1[i])):
        list3[i].append(list1[i][j]*list2[i][j])


print(list3)
```



Lab Task 1:

Create two lists based on the user values. Merge both the lists and display in sorted order. A if marks

```
list1=[]
list2=[]
for i in range(0,4):
    list1.append(int((input("Enter 4 values for
list one : "))))

for i in range(0,4):
    list2.append(int((input("Enter 4 values for
list two : "))))

print(list1)
print(list2)

list3=list1+list2
list3.sort()

print(f"appended list 1 and list 2 in sorted
order  is : {list3}")
```



Lab Task 2:

Repeat the above activity to find the smallest and largest element of the list. (Suppose all the elements are integer values)

```
list=[1,45,25,78,34,23,90,11,10]


# using builtin methods

print(f"max value in the list is : {max(list)}")
print(f"min value in the list is : {min(list)}")

# without using builtin methods
max=list[0]
min=list[0]
for i in list:
    if i>max:
        max=i
    if i<min:
        min=i

print(f"max value in the list is : {max}")
print(f"min value in the list is : {min}")
```