PYTHON FOR DATA SCIENCE

DAY-4 (CLASS CODE)

Q 1. WAP to input a list and print in reverse order .

SOURCE CODE :

```
l1=eval(input("Enter the list :"))                    #input a list from user
print("The reversed list for the given list is :")
for i in range((len(l1)-1),-1,-1):                    #loop for reversing
    print(l1[i])
```

OUTPUT :

```
========= RESTART: C:/Users/dell/OneDrive/Documents/python files/w4.py =========
Enter the list :1,2,3,4,5
The reversed list for the given list is :
5
4
3
2
1
```

Q 2.WAP to fetch element starting from 4 till 'a' in a given list (using slicing)

SOURCE CODE :

```
l1=[1,2,'a',6,9,4,'b']                          #given list
print("The resultant list is :",l1[-2:-6:-1])   #print the element from 4 till 'a'
```

OUTPUT :

```
========= RESTART: C:/Users/dell/OneDrive/Documents/python files/w4.py =========
The resultant list is : [4, 9, 6, 'a']
>>>
```

Q 3. WAP to search a element in a list and if found also print its index .

SOURCE CODE :

```
l1=eval(input("Enter a list : "))                    #input a list from user
l2=[]
```

```
check=int(input("Enter the number you want to check : "))    #input the number
for i in range(len(l1)):
    if (l1[i]==check):
        l2.append(i)
for i in l1:
    if (i==check):
        print("The number",i,"is present in",l2,'index')          #print found and it index
        break

else :
    print("SORRY ! not found")                                    #print sorry message
```

OUTPUT :

```
========= RESTART: C:\Users\dell\OneDrive\Documents\python files\w4.py =========
Enter a list : 1,3,2,4,5,6,4,7
Enter the number you want to check : 4
The number 4 is present in [3, 6] index in the given list
>>>
========= RESTART: C:\Users\dell\OneDrive\Documents\python files\w4.py =========
Enter a list : 1,2,3,5,7,8
Enter the number you want to check : 5
The number 5 is present in [3] index in the given list
>>>

========= RESTART: C:\Users\dell\OneDrive\Documents\python files\w4.py =========
>>> Enter a list : 3,4,5,8,2,1
Enter the number you want to check : 9
SORRY ! not found
```

Q 4. WAP to print square of the all the element of a inputed list and then store them into a new list .

SOURCE CODE :

```
l1=eval(input("Enter a list : "))        #input a list
l2=[]                                    #create an empty list for storing squared elements
for i in l1:
    l2.append(i**2)                      #insert squared value in empty list
print("The required list is :",l2)       #printing required list
```

OUTPUT :

```
========= RESTART: C:\Users\dell\OneDrive\Documents\python files\w4.py ========
Enter a list : 4,5,6,7
The required list is : [16, 25, 36, 49]
>>>

========= RESTART: C:\Users\dell\OneDrive\Documents\python files\w4.py ========
>>> Enter a list : 1,2,3,4,5,6
The required list is : [1, 4, 9, 16, 25, 36]
>>>
```

Q 5. WAP create a dictionary by taking key and value as input.

SOURCE CODE :

```
key = input("Enter the key: ")          #input key for your dictionary
value = input("Enter the value: ")      #input key for your dictionary
my_dict = {key: value}
print(my_dict)                          #print your dictionary
```

OUTPUT :

```
========= RESTART: C:\Users\dell\OneDrive\Documents\python files\w4.py =========
Enter the key: aditya
Enter the value: 19
{'aditya': '19'}
```

Q 6. WAP print the names and ages of of 5 students where names are the keys and ages are its values take input .

SOURCE CODE :

```
my_dict={}                              #create an empty dictionary
for i in range(5):                      #loop till 5
    name = input("Enter the name : ")
    age = input("Enter the age : ")


    my_dict.update({name:age})


print(my_dict)                          #print your required dictionary
```

OUTPUT :

```
========= RESTART: C:\Users\dell\OneDrive\Documents\python files\w4.py ========
Enter the name : solar
Enter the age : 19
Enter the name : sidd
Enter the age : 18
Enter the name : adii
Enter the age : 19
Enter the name : john
Enter the age : 20
Enter the name : zack
Enter the age : 17
{'solar': '19', 'sidd': '18', 'adii': '19', 'john': '20', 'zack': '17'}
```

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