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1928300

CSSE-4

LIST AND TUPLE

Q.1) Write a python program to find the number of items available in the list.

```
a=[1,2,5,8,9,0,7]
print(len(a))
```

```
7
```

Q.2) Write a python program to find the largest number from a list.

```
[ ] a=[1,2,3,4,5,7]
    a.sort()
    print(a)
    print("Largest number is: ",a[-1])
```

```
[1, 2, 3, 4, 5, 7]
Largest number is:  7
```

Q.3) Write a python program to find sum of all the items in a list

```
[ ] a=[1,2,3,4,5]
    addition=sum(a)
    print("Sum of all elements: ",addition)
```

```
Sum of all elements:  15
```

Q.4) Write a python program to split the given list into 3 sub-lists as per your requirement.

```
[ ]  l1 = [1,5,3,4,2,6]
     print(l1[0:2])
     print(l1[-3:])
     print(l1[2:5])
```

```
[1, 5]
[4, 2, 6]
[3, 4, 2]
```

Q.5) Write a python program to sort the elements of the given list in descending order.

```
[ ]  a=[2,7,4,3,8,1]
     a.sort(reverse=True)
     print(a)
```

```
[8, 7, 4, 3, 2, 1]
```

Q.6) Write a python program to create two lists and join the second list with the first, then display the resultant list.

```
[ ]  a=[1,2,3,4,5]
     b=[6,7,8,9,10]
     display=b+a
     print(display)
```

```
[6, 7, 8, 9, 10, 1, 2, 3, 4, 5]
```

Q.7) Write a python program to reverse a tuple.

```
[ ]  a=(1,5,3,6,7,2)
     reverse=a[::-1]
     print(reverse)
```

```
(2, 7, 6, 3, 5, 1)
```

Q.8) Write a python program to convert a tuple to a string

```
[ ]  a=('m','e','g','h','a')
     s=''.join(a)
     print(s)
```

```
megha
```

Q.9) Write a python program to convert a list to a tuple.

```
[ ]  a=[1,2,4,6,8]
     print(a)
     b=tuple(a)
     print(b)
```

```
[1, 2, 4, 6, 8]
(1, 2, 4, 6, 8)
```

DICTIONARY AND SET

Q.1) Write a python program to create a dictionary with a set of key value pair and fetch the value according to the specified key.

```
dict={
    "Name" : "Megha Singh",
    "Branch" : "CSSE",
    "University" : "KIIT",
    "City" : "Bhubaneswar"
}

print(dict['Name'])
print(dict['Branch'])
```

```
Megha Singh
CSSE
```

Q.2) Write a python program to create an empty dictionary and add the key value pairs to this dictionary.

```
[ ] dict={}
    updatedict={
        "Name" : "Megha",
        "Branch" : "CSSE",
        "University" : "KIIT"
    }
    dict.update(updatedict)
    print(dict)
```

```
{'Name': 'Megha', 'Branch': 'CSSE', 'University': 'KIIT'}
```

Q.3) Write a python program to concatenate two dictionaries to create a new one.

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```
[ ]  dict={
         "place":"Hyderabad",
         "state":"Telangana"
     }
     updatedict={
         "Student":"Megha",
         "Branch":"CSSE"
     }
     dict.update(updatedict)
     print(dict)
```

```
{'place': 'Hyderabad', 'state': 'Telangana', 'Student': 'Megha', 'Branch': 'CSSE'}
```

Q.4) Write a python program to remove a key from a dictionary.

```
[ ]  dict={'a':1,'b':2,'c':3,'d':4}
     print(dict)
     del dict['a']
     print(dict)
```

```
{'a': 1, 'b': 2, 'c': 3, 'd': 4}
{'b': 2, 'c': 3, 'd': 4}
```

Q.5) Write a python program to sort a dictionary by key.

```
[ ]  dict={'2':1,'9':2,'5':3,'3':4}
     print(sorted(dict.items()))
```

```
[('2', 1), ('3', 4), ('5', 3), ('9', 2)]
```

Q.6) Write a python program to create a set and add some elements in it. Also try to add repeating elements, then print the set.

```
[ ]  set1=set()
     print(type(set1))
     set1.add(1)
     set1.add(2)
     set1.add(3)
     set1.add(4)
     set1.add(4)
     set1.add(5)
     print(set1)
```

```
<class 'set'>
{1, 2, 3, 4, 5}
```

Q.7) Write a python program to add a tuple in an existing set and print the updated set. Also remove a specific element from the set and print.

```
[ ]  set2={35,23,6,1,4,9}
     print(set2)
     set2.add((4,7,8))
     print("After adding tuple : ",set2)
     set2.remove(23)
     print("After removing an element : ",set2)
```

```
{1, 35, 4, 6, 9, 23}
After adding tuple :  {1, 35, 4, 6, 9, 23, (4, 7, 8)}
After removing an element :  {1, 35, 4, 6, 9, (4, 7, 8)}
```

Q.8) Write a python program to create a set which is a union of two sets.

```
[ ]  set1={1, 2, 3, 4, 5};
     set2={6, 7, 8, 9, 10};
     print("Union of set1 and set2 is",set1 | set2)
```

```
Union of set1 and set2 is {1, 2, 3, 4, 5, 6, 7, 8, 9, 10}
```

Q.9) Write a python program to check if a set is a subset of another set.

```
[ ]  setx= set(["apple", "mango"])
     sety= set(["mango", "orange"])
     print("x: ",setx)
     print("y: ",sety)
     print("If x is subset of y")
     print(setx <= sety)
     print(setx.issubset(sety))
     print("If y is subset of x")
     print(sety <= setx)
     print(sety.issubset(setx))
```

```
x:  {'mango', 'apple'}
y:  {'mango', 'orange'}
If x is subset of y
False
False
If y is subset of x
False
False
```