Task - 8

```python
# 1. Script to merge two dictionaries
def Merge(dict1, dict2):
    res = dict1 | dict2
    return  res

dict1 = {"China": "Beijing", "England": "London"}
dict2 = {"India": "Delhi", "Japan": "Tokyo"}
dict3 = Merge(dict1, dict2)
print("merge two dictionaries - ", dict3)
```

output : -

```
merge two dictionaries -
  {'China': 'Beijing', 'England': 'London', 'India': 'Delhi', 'Japan': 'Tokyo'}
```

```python
# 2. Sort the value in ascending
numbers = [1, 4, 7, 9]
numbers.sort()
print("sorting  list in ascending - ", numbers)

# Sort the value in descending
numbers.sort(reverse=True)
print("sorting  list in descending - ", numbers)
# convert  list  into set
my_set = set(numbers)
print("converted  list  into set - ", my_set,type(my_set))
```

output : -

```
sorting list in ascending -  [1, 4, 7, 9]
sorting list in descending -  [9, 7, 4, 1]
converted list into set -  {9, 4, 1, 7} <class 'set'>
```

```python
# 3. Write a Python program to list number of items in a dictionary key and
 sort the list with the help of a function & without the function.
my_dict = {12: 'abc', 6: 'hello',  10: 'world'}
```

```python
A = list(my_dict.keys())
print(A)


# with function
def sorting(n):
    for i in range(len(n)):
        for j in range(i + 1, len(n)):
            if (n[i] > n[j]):
                temp = n[i]
                n[i] = n[j]
                n[j] = temp
    print(n,"with using function")
sorting(A)

# without function
A.sort()
print(A,"with out using function")
```
output : -

```
[12, 6, 10]
[6, 10, 12] with using function
[6, 10, 12] with out using function
```

```python
# 4. Write a Python program to get a string from a given string (user input)
# and change the first occurrence of the word to a user specified input.
my_str = input("Enter string :")
my_word = input("Enter the word you want to change : ")
change_word = input("Enter the word to replace with above word's first occurrence : ")
new_str = my_str.replace(my_word, change_word, 1)
print("After replacing first occurrence : ", new_str)
```
output : -

```
Enter string :hi world
Enter the word you want to change : hi
Enter the word to replace with above word's first occurrence : hello
After replacing first occurrence :  hello world
```

```python
# 5. Write a Python program to get a string from a given string where all
# occurrences of its first char have been changed to capital letter.
my_str = input("Enter string :")
```

```
my_word = input("Enter word whose first char you want to capitalize :")
new_word = my_word.capitalize()
new_str = my_str.replace(my_word, new_word)
print(new_str)
```

output : -

```
Enter string :thirty days thirty hour coding challenge
Enter word whose first char you want to capitalize :thirty
Thirty days Thirty hour coding challenge
```

```
# 6. Write a Python program to find the repeated items of a list.
l = [1, 2, 3, 4, 5, 6, 1, 2, 7, 9, 8, 4]
l1 = []
for i in l:
    if i not in l1:
        l1.append(i)
    else:
        print(i, end=' ')
```

output : -

```
1 2 4
```

```
# 7. Write a Python program to check the sum of three elements and divided by
 a value which is given as an input by the user
a = int(input("Enter  1st element : "))
b = int(input("Enter 2nd element : "))
c = int(input("Enter  3rd element : "))
print("Sum of the three element :  ",a+b+c)
d = int(input("Enter value by which you want to divide above sum : "))
print("Answer after divide a sum : ",(a+b+c)/d)
```

output : -

```
Enter 1st element : 5
Enter 2nd element : 8
Enter 3rd element : 15
Sum of the three element :   28
Enter value by which you want to divide above sum : 4
Answer after divide a sum :  7.0
```

```python
# 8. Write a Python program to find the Mean,median,mode among three given
 numbers
numbers = [14,21,15,6,10,21,7]
import statistics
my_mean = statistics.mean(numbers)
print("Mean : ",my_mean)

my_median = statistics.median(numbers)
print("Median : ",my_median)

my_mode = statistics.mode(numbers)
print("Mode :",my_mode)
```

output : -

```
Mean :  13.428571428571429
Median :  14
Mode : 21
```

```python
# 9. Write a Python program to swap cases of a given string
def swap_case_string(str1):
  result_str = ""
  for item in str1:
    if item.isupper():
       result_str += item.lower()
    else:
       result_str += item.upper()
  return result_str
print(swap_case_string("heLLo woRLd"))
```

output : -

```
HEllo WOrlD
```

```python
# 10. Write a program to convert an integer to binary & octa decimal
dec = 123
print("The decimal value of", dec, "is:")
print(bin(dec), "in binary.")
print(oct(dec), "in octal.")
```

output : -

```
The decimal value of 123 is:
0b1111011 in binary.
0o173 in octal.
```