```python
#1. Write a python script to merge two python dictionaries.
fruits = {'apple':5,'banana':3,'orange':6,'watermelon':4}
dry_fruits = {'cashew':4,'almond':6,'pistachio':3}
fruits.update(dry_fruits)
print('Merged Dictionary:')
print(fruits)
```

**Output: -**

```
Merged Dictionary:
{'apple': 5, 'banana': 3, 'orange': 6, 'watermelon': 4, 'cashew': 4, 'almond': 6,
 'pistachio': 3}
```

```python
#2. Write a program to sort the value from descending to ascending order in list
and convert it into a set.
A = [4,6,3,7,8,1,5,2,10,9]
A.sort()
print(A)
B = set(A)
print(B,type(B))
```

**Output: -**

```
[1, 2, 3, 4, 5, 6, 7, 8, 9, 10]
{1, 2, 3, 4, 5, 6, 7, 8, 9, 10} <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 and without the function.
fruits = {5:'apple',3:'banana',6:'orange',4:'watermelon'}
C = list(fruits.keys())
print(C)

# 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)
sorting(C)
```

```
# Without function
C.sort()
print(C)
```

**Output: -**

```
[5, 3, 6, 4]
[3, 4, 5, 6] ← With function
[3, 4, 5, 6] ← Without using function
```

```
#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.
org_str = input("Enter your desired string: ")
org_wrd = input("Enter the word from above string which you want to change: ")
new_wrd = input("Enter the word you want to replace with above word's first occur
rence: ")
new_str = org_str.replace(org_wrd,new_wrd,1)
print("Your original entered string: ",org_str)
print("After replacing: ",new_str)
```

**Output: -**

```
Enter your desired string: 30 days 30 hours challenge
Enter the word from above string which you want to change: 30
Enter the word you want to replace with above word's first occurrence: Thirty
Your original entered string:  30 days 30 hours challenge
After replacing:  Thirty days 30 hours challenge
```

```
#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.
str1 = input("Enter your desired string: ")
word = input("Enter word whose first char you want to capitalize: ")
new_word = word.capitalize()
str2 = str1.replace(word,new_word)
print("Your original entered string: ",str1)
print("After capitalizing your desired words: ",str2)
```

**Output: -**

```
Enter your desired string: thirty days thirty hours thirty tasks
Enter word whose first char you want to capitalize: thirty
Your original entered string:  thirty days thirty hours thirty tasks
After capitalizing your desired words:  Thirty days Thirty hours Thirty tasks
```

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

**Output: -**

```
1 4 6 7
```

```python
#7. Write a python program to check 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 1st element: "))
c = int(input("Enter 1st element: "))
print("Sum of above threee elements is: ",a+b+c)
d = int(input("Enter value by which you want to divide above sum: "))
print("Sum divided by your given number: ",(a+b+c)/d)
```

**Output: -**

```
Enter 1st element: 20
Enter 1st element: 20
Enter 1st element: 10
Sum of above three elements is:  50
Enter value by which you want to divide above sum: 5
Sum divided by your given number:  10.0
```

```python
#8. Write a python program to find the Mean,median,mode among three given numbers
import numpy
age = [19,20,18]
mean_age = numpy.mean(age)
print(mean_age)

median_age = numpy.median(age)
print(median_age)

from scipy import stats
mode_age = stats.mode(age)
print(mode_age)
```

**Output: -**

```
31.333333333333332
27.0
ModeResult(mode=array([19]), count=array([1]))
```

```
#9. Write a python program to swap cases of a given string.
def swap_cases(mystr):
    resultstr = ""
    for item in mystr:
        if item.isupper():
            resultstr += item.lower()
        else:
            resultstr += item.upper()
    return resultstr

print(swap_cases("THIRTY DAYS thirty hours CHALLenge"))
```

**Output: -**

```
thirty days THIRTY HOURS challENGE
```

```
#10. Write a program to convert an integer to binary & octal decimal.
number = 555
print("The decimal value of",number,"is:")
print(bin(number),"in binary.")
print(oct(number),"in octal.")
```

**Output: -**

```
The decimal value of 555 is:
0b1000101011 in binary.
0o1053 in octal.
```