Practical 3

A) String Operations: Reverse a string, replace string with another string, merge two strings, Find character is in string or not without using loops, Split string into multiple words

Code:-

```
Str1 = "ravi"
Str2 = " patel"
#Concatenate String
Str3 = Str1 + Str2
Print("Concatenate String : ",Str3)
#Length Of String
Str4 = "D23ce188"
Print("Length : ",Len(Str4))
#Accessing Individual Elements Of String
Str5 = "D23ce188@Charusat.Edu.In"
Print("First Element : ",Str5[0])
Print("Last Element : ",Str5[-1])
#Reverse String
Str6 = "Hello ! World"
Str7 = Str6[ : : -1]
Print("Reverse String : ",Str7)
#Copying String

Str8 = "Earth Is A Sphere"
Str9 = Str8[3:10]
Print("Copying String : ",Str9)
#Replace A With B
Str10 = "Good Morning"
Str11 = Str10.Replace('N','M')
Print("Replacing A With B : ",Str11)
#Upper And Lower Case
Str12 = "My Name : ravi"
Str13 = Str12.Upper()
Str14 = Str13.Lower()
Print("Upper Case : ",Str13)
```

```
Print("Lower Case : ",Str14)
#Split
Str15 = "Hello, Moto!"
Str16 = Str15.Split()
Str17 = Str15.Split('!')
Print("Split : ",Str16)
Print("Split : ",Str17)
#Character In String Without Loop
Str18 = "Harsh, Got Killed"
Print("Char In String : ",'H' In Str18)
#Count Of Occurence And Find
Str19 = "Computer Engineering"
Print("Count Of H : ",Str19.Count('E'))
Str20 = "Bachelor Of Technology"
Print("Find H : ",Str20.Find('H'))
```

Output:-

```
Concatenate String :  ravi patel
Length :  8
First Element :  D
Last Element :  n
Reverse String :  dlroW ! olleH
Copying String :  th Is A
Replacing A With B :  Good Morning
Upper Case :  MY NAME : RAVI
Lower Case :  my name : ravi
Split :  ['Hello,', 'Moto!']
Split :  ['Hello, Moto', '']
Char In String :  True
Count Of E :  1
Find H :  -1
>
```

B) Dictionaries Operations: Apply “Update, Delete, clear, popitem, pop, get, keys and values” operation in the dictionary. Create 3 dictionaries and merge them into dictionary

Code:-

```
#Dictionary
#empty dictionary {}
dict1 = dict()
print("Empty dict : ",dict1)
dict2 = {165:"nippam", 188:"ravi", 182:"husen"}
print("\nDictionary 2 : ",dict2)
#copy dictionary
dict3 = dict2.copy()
print("\nDictionary 3 : ",dict3.items())
#pop out element or pair
ele = dict2.pop(188)
print("\nElement popped: ",ele)
print("\nLast item popped : ",dict2.popitem())
#only keys and only values
print("\nKeys : ",dict2.keys())
print("Values : ",dict2.values())
#concatenate dictionaries
dict4 = dict({165:"rudrax"})
dict4.update(dict2)
print("\nUpdated : ",dict4)
#delete item
del dict4[165]
print("After deleting : ",dict4)
#merge 3 dictionaries
dict5 = {188:"ravi"}
dict6 = dict({179:"kirtan"})
dict7 = {**dict2,**dict5,**dict6}
print("\nAfter merging 3 dictionaries : ",dict7)
#clear function
print("Clear function : ",dict7.clear())
```

output:-

```
Empty dict: {}

Dictionary 2: {165: 'nippam', 188: 'ravi', 182: 'husen'}

Dictionary 3: dict_items([(165, 'nippam'), (188, 'ravi'), (182, 'husen')])

Element popped: ravi
Dictionary 2 after popping: {165: 'nippam', 182: 'husen'}
Last item popped: (182, 'husen')

Keys: dict_keys([165])
Values: dict_values(['nippam'])

Updated: {165: 'nippam'}
After deleting: {}

After merging 3 dictionaries: {165: 'nippam', 188: 'ravi', 179: 'kirtan'}
After clearing: {}
>
```