

5.7.26

EXPERIMENT NO :- 06 (while/ for loop)

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- 1 Write a program to create a list which contains some group of fruit names. Display the elements of list from last index to 1st index (reverse) and also show the length of each element. Create another list which collects the reverse of each element.
- 2 Write a program to create a dictionary and input keys and values. Then create another dictionary which collects the values of 1st dictionary as key and key of 1st dictionary as values. And then display both dictionaries.
- 3 Write a program to input a sentence. Store each word as element in to a list LIST1. Now display the element of list along with its index (using enumerate()). Create another list LIST2 having elements as a series of numbers. Now use ZIP() to combine the elements of both lists to create a 3rd list LIST3 and then display it.

`enumerate()` returns : Index number corresponding word useful to get both index and value

Answer

1 `L = ["APPLE", "Banana", "Mango"]`

`print ("Fruits displayed from last to first index with their lengths")`
`for i in L:-1 :`

`print(i, "- Length: ", len(i))`

`print ("In List containing reverse of each fruit name :- ")`

`rev = []`

`for fruit in L :`

`rev.append(fruit[:: -1])`

`print (rev)`

Output :-

Fruits displayed from last to first index with their lengths:-

Mango - Length : 5

Banana - Length : 6

APPLE - Length : 5

List containing reverse of each fruit name :-

[ELPPA', 'ananaB', 'OGHAM']

2) $d = \{\}$

$n = \text{int}(\text{input}("Enter number of key-value pairs :-"))$

for i in range(n):

$k = \text{input}("Enter key :-")$

$v = \text{input}("Enter value :-")$

$d[k] = v$

$r = \{\}$

for k, v in d.items():

$r[v] = k$

$\text{print}("Original Dictionary :-")$

$\text{print}(d)$

$\text{print}("Reversed Dictionary (values as keys) :-")$

$\text{print}(r)$

Output :-

Enter number of key-value pairs :- 2

Enter key :- Name

Enter value :- Rajesh Rana

Enter key :- Roll No.

Enter value :- 24CSEAIML015

original dictionary :-

{'Name': 'Rajesh Rana', 'Roll no.': '24CSEAIML015'}

Reversed Dictionary (values as keys) :-

{'Rajesh Rana': 'Name', '24CSEAIML015': 'Roll no.'}

3 i = input ('Enter a sentence :-')

LIST1 = i.split()

print ("Elements of LIST1 with index :-")

for i, w in enumerate (LIST1):

print (i, w)

LIST2 = list (range 1, len (LIST1)+1)

LIST3 = list (zip (LIST1, LIST2))

print ("Combined LIST3 using ZIP :-")

print (LIST3)

OUTPUT:-

Enter a sentence :- My name is Rajesh Rana

Elements of LIST1 with index :-

0 My

1 name

2 is

3 Rajesh

4 Rana

Combined LIST3 using ZIP :-

[('My', 1), ('name', 2), ('is', 3), ('Rajesh', 4), ('Rana', 5)]