

AssignmentPython6.1Loops List, If-else

Q1. WAP to input a string and print individual characters in the string using loop

```
In [8]: st=input("enter a string: ")
        for i in st:
            print(i,end=" ")
```

```
enter a string: string
s t r i n g
```

Q2. WAP to input a string and print the ASCII value of each character in the string

```
In [1]: st=input("enter a string: ")
        print("Ascii value of charecters")
        for i in st:
            print(i,"=",ord(i))
```

```
enter a string: string
Ascii value of charecters
s = 115
t = 116
r = 114
i = 105
n = 110
G = 71
```

Q3. WAF that takes a list of numbers from user as argument and returns the sum of only odd numbers

```
In [14]: def odd_sum():
        n = int(input(" Please Enter number: "))
        sumo = 0
        for i in range(1, n+1):
            if(i % 2 != 0):
                print("{} ".format(i))
                sumo= sumo + i
        print("The Sum of Odd Numbers from 1 to {} = {}".format(n, sumo))
        odd_sum()
```

```
Please Enter number: 5
1
3
5
The Sum of Odd Numbers from 1 to 5 = 9
```

Q4. WAP to input a list of numbers and store

in a tuple .now input another number and print the index of this number in the tuple

```
In [11]: s=input("enter element of list ")
l=s.split()
print("list",l)
t=tuple(l)
print("tuple",t)

s=input("enter element of list ")
t=tuple(s)
print("tuple",t)
print(t)

enter element of list 1 2 3 4 5 6 7 8
list ['1', '2', '3', '4', '5', '6', '7', '8']
tuple ('1', '2', '3', '4', '5', '6', '7', '8')
enter element of list 9
tuple ('9',)
('9',)
```

```
In [13]: print(t.index('9'))
```

0

Q5 . Create a list of 10 random numbers and then print the list ,sum of all numbers and average ,use a for loop. also print elements at only even indexes in the list

```
In [6]: l=[2,4,5,9,8,3]
print("list",l)
suml=0
for i in l:
    suml=suml+i
    avg=suml//2
print("Sum of all numbers",suml)
print("average of all numbers",avg)
ev_list = l[1::2]
print("elements present at even index",ev_list)
```

```
list [2, 4, 5, 9, 8, 3]
Sum of all numbers 31
average of all numbers 15
elements present at even index [4, 9, 3]
```

Q6. WAP to input 10 numbers repeatedly (using range base for loop)and stor them in a list .print the list and sum of numbers in list.

```
In [1]: lst=[]
l=int(input("enter a number: "))
```

```

for i in range(0,1):
    ele=int(input())
    lst.append(ele)
print(lst)
suml=0
for i in range(0,len(lst)):
    suml= suml + lst[i]
print("Sum of list element is ", suml)

```

```

enter a number: 10
2
3
4
5
6
7
3
2
4
5
[2, 3, 4, 5, 6, 7, 3, 2, 4, 5]
Sum of list element is 41

```

Q7. WAP to input and print its table Ex. if user enters the number as 7 ,output should be

```

In [9]: n=int(input("enter a number : "))
        for i in range(1,11):
            s=n*i
            print(n,"*",i,"=",s)

```

```

enter a number : 7
7 * 1 = 7
7 * 2 = 14
7 * 3 = 21
7 * 4 = 28
7 * 5 = 35
7 * 6 = 42
7 * 7 = 49
7 * 8 = 56
7 * 9 = 63
7 * 10 = 70

```

Q8. WAP to print total number of spaces in a string(use for loop to iterate over the string ,dont use count function)

```

In [38]: st=input("enter a string: ")
        c=0
        for i in range(0,len(st)):
            if (st[i] == " "):
                c=c+1
        print("Spaces=",c)

```

```

enter a string: Pratiksha Uttam Ghare
Spaces= 2

```

Q9. WAP to input a string and count number of vowels in the string

```
In [61]: st=input("enter a string: ")
         lo='aeiou'
         up='AEIOU'
         count=0
         for i in st:
             if (i in lo) or (i in up):
                 count=count+1
         print("number of vowels count is : ",count)
```

enter a string: PratiKSHA
number of vowels count is : 3

Q10. WAP to input a string and replace all vowels with '_'

```
In [50]: st = input("Enter The string: ").lower()
         vowels = ('a', 'e', 'i', 'o', 'u');
         for i in st:
             if i in vowels:
                 newstr = st.replace(x,"_");
         print("New string after replacing:",newstr);
```

Enter The string: Pratiksha
New string after replacing: pr_tiksh_

Q11. Find output

```
In [11]: for num in range(10):
         print("Num: ",num)
         if num%4==0:
             break
         print("Loop Ends")
```

Num: 0
Loop Ends

```
In [12]: import sys
         for num in range (10):
             print("Num: ",num)
             if num%4==0:
                 sys.exit()
         print("Loop Ends")
```

Num: 0

An exception has occurred, use %tb to see the full traceback.

SystemExit

C:\ProgramData\Anaconda3\lib\site-packages\IPython\core\interactiveshell.py:3445: UserWarning: To exit: use 'exit', 'quit', or Ctrl-D.
warn("To exit: use 'exit', 'quit', or Ctrl-D.", stacklevel=1)

Q12.find the output of following code

In [14]:

```

for il in range (1,6):
    for i2 in range(5):
        print("*",end="")
    print()
for il in range(1,6):
    print(str(il)*il)

```

```

*****
*****
*****
*****
*****

```

```

-----
TypeError                                Traceback (most recent call last)
<ipython-input-14-b0f1cda469ab> in <module>
      4     print()
      5 for il in range(1,6):
----> 6     print(str(il)*il)

```

TypeError: 'str' object is not callable

In [15]:

```

for i1 in range (1,6):
    for i2 in range (i1):
        print(i1,end="")
    print()
for i1 in range(1,6):
    for i2 in range (i1+1):
        print("*",end="")
    print()

```

```

1
22
333
4444
55555
**
***
****
*****
*****

```

Q13 Generate a list of 10 number(10 - 50) and print the list and sum of all elements. Now take the list and remove the five largest elements from the list and print the list and its sum again

In [37]:

```

l=list(range(10,51))
l.sort()
print("List generates",l)
print("-----")
suml=0
for i in l:
    suml=suml+i
print("sum of list elements is =",suml)

print("-----")
rr=l[-5:]

```

```
print("last 5 max elements are ",rr)

del l[-5:]
print("-----")
print("After removeing ragest 5 numbers from list: ", "\n",l)
```

List generates [10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50]

sum of list elements is = 1230

last 5 max elements are [46, 47, 48, 49, 50]

After removeing ragest 5 numbers from list:

[10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45]

In []: