

```
In [7]: #1
```

```
In [8]: s="sudh"  
c=45.67  
l=[2,3,4,5,6, 'sudh', (3+7j), True, 34, 56]  
t1=(1,2,3,4)
```

```
In [ ]: #6
```

```
In [5]: l=[1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25]  
for i in l:  
    if i%3==0:  
        print(i, 'the no is divisble by 3')  
    else:  
        print(i, 'the no is not divisble by 3')
```

```
1 the no is not divisble by 3  
2 the no is not divisble by 3  
3 the no is divisble by 3  
4 the no is not divisble by 3  
5 the no is not divisble by 3  
6 the no is divisble by 3  
7 the no is not divisble by 3  
8 the no is not divisble by 3  
9 the no is divisble by 3  
10 the no is not divisble by 3  
11 the no is not divisble by 3  
12 the no is divisble by 3  
13 the no is not divisble by 3  
14 the no is not divisble by 3  
15 the no is divisble by 3  
16 the no is not divisble by 3  
17 the no is not divisble by 3  
18 the no is divisble by 3  
19 the no is not divisble by 3  
20 the no is not divisble by 3  
21 the no is divisble by 3  
22 the no is not divisble by 3  
23 the no is not divisble by 3  
24 the no is divisble by 3  
25 the no is not divisble by 3
```

```
In [2]: #4)
```

```
In [6]: l=[2,3,4,5,6,7,8, "sudh", 23.45, True]  
for i in l:  
    print(type(i))  
    if i==' ':  
        continue  
    print(i)  
else:  
    print("this will be executed once for loop will complete itself successfully")
```

```

<class 'int'>
2
<class 'int'>
3
<class 'int'>
4
<class 'int'>
5
<class 'int'>
6
<class 'int'>
7
<class 'int'>
8
<class 'str'>
sudh
<class 'float'>
23.45
<class 'bool'>
True
this will be executed once for loop will complete itself successfully

```

```

In [13]: #Q1

var2=['d1,m1,ds']
var1=''

```

```

In [15]: type(var2)

```

```

Out[15]: str

```

```

In [14]: type(var1)

```

```

Out[14]: str

```

```

In [11]: var3=['d1','m1','python']

```

```

In [12]: type(var3)

```

```

Out[12]: list

```

```

In [16]: var4=1
type(var4)

```

```

Out[16]: int

```

```

In [22]: #Q3

#1)/-division operator divides left hand operand by right hand operand
#ex-5/2
#2)%-Module-Module operator to get remainder in integer division.
#ex-5%2
#3)//-division floor, performs division and gives only integer quotient.
#ex-4//2

```

```
#4)**-Exponent operator,calculates exponential power value.
#ex-2**3
```

```
In [24]: #Q7
#Mutable data type- allows us to change data in particular index.
#Immutable data type- does not allows to change data in particular index.

#Ex List,set,Dictionaries are mutable data type.
#Tuple,Integers,Strings are immutable data type.
```

```
In [25]: #LIST EX
l=[2,3,4,5,'sudh']
l[1]=300
```

```
In [26]: 1
```

```
Out[26]: [2, 300, 4, 5, 'sudh']
```

```
In [28]: #String EX
s="sudh"
s[1]='a'
```

```
-----
TypeError                                Traceback (most recent call last)
Cell In[28], line 3
      1 #String EX
      2 s="sudh"
----> 3 s[1]='a'

TypeError: 'str' object does not support item assignment
```

```
In [30]: #Q5
```

```
In [31]: m=int(input("enter no 1"))
n=int(input("enter no 2"))
if m%n==0:
    print("no 1 is divisible by no 2")
else:
    print("no 1 is not divisible by no 2")
```

```
no 1 is divisible by no 2
```

```
In [ ]:
```