

## pbasics

May 12, 2023

```
[21]: a="Hello world"
      b=[1,2,3,4,5]
      c=34.567
      d=(1,34,56)
      print(a)
      print(b)
      print(c)
      print(d)
```

```
Hello world
[1, 2, 3, 4, 5]
34.567
(1, 34, 56)
```

```
[19]: var1=" "
      print(type(var1))
      var2=" [DS,ML,Python] "
      print(type(var2))
      var3=["DS","ML","Python"]
      print(type(var3))
      var4=1
      print(type(var4))
```

```
<class 'str'>
<class 'str'>
<class 'list'>
<class 'int'>
```

```
[22]: #use of /
      #it is used for division
      print(4/2)
      #use of %
      #it is used for modular division
      print(65%2)
      #usage of //
      #it is used for floor division
      print(5//2)
      #usage of **
```

```
#it is used for exponentiation  
print(5**2)
```

```
2.0  
1  
2  
25
```

```
[24]: a=[1,2+3j,3,True,5,6,"abcd",8.56,9,0]  
      for i in a:  
          print(i,type(i))
```

```
1 <class 'int'>  
(2+3j) <class 'complex'>  
3 <class 'int'>  
True <class 'bool'>  
5 <class 'int'>  
6 <class 'int'>  
abcd <class 'str'>  
8.56 <class 'float'>  
9 <class 'int'>  
0 <class 'int'>
```

```
[12]: a=12  
      b=2  
      count=0  
      while a%b==0:  
          a=a/b  
          count=count+1  
      print("A is divisible by B and it is divisible by %d times"%count)
```

```
A is divisible by B and it is divisible by 2 times
```

```
[14]: list=[25]  
      for i in list:  
          if (i%3)==0:  
              print("%d is divisible by 3"%i)  
          else:  
              print("%d is not divisible by 3"%i)
```

```
25 is not divisible by 3
```

```
[16]: #mutability means we change or append values to it  
      list=[1,2,3,4]  
      print(list)  
      list[2]=0  
      print(list)  
      #immutability means we cannot change or append values to it
```

```
a="hello"  
a[2]="a"  
print(a)
```

```
[1, 2, 3, 4]
```

```
[1, 2, 0, 4]
```

```
-----  
TypeError                                Traceback (most recent call last)  
Cell In[16], line 8  
      6 #immutability means we cannot change or append values to it  
      7 a="hello"  
----> 8 a[2]="a"  
      9 print(a)  
  
TypeError: 'str' object does not support item assignment
```

```
[ ]:   
[ ]:   
[ ]:   
[ ]:   
[ ]: 
```