

Number Sysytem(Binary,Octal,Decimal and Hexa Decimal)

```
In [ ]: #Binary Number System  
#Base is 2  
#o/p will come using 0b
```

```
In [96]: 25
```

```
Out[96]: 25
```

```
In [97]: bin(25)          #LCM of 25
```

```
Out[97]: '0b11001'
```

```
In [98]: bin(30)
```

```
Out[98]: '0b11110'
```

```
In [99]: bin(10)
```

```
Out[99]: '0b1010'
```

```
In [100... bin(1)
```

```
Out[100... '0b1'
```

```
In [105... bin(8)
```

```
Out[105... '0b1000'
```

```
In [ ]: #Octal Number System  
# base is 8 and values from 0-7  
# o/p will come using 0o
```

```
In [101... 35
```

```
Out[101... 35
```

```
In [102... oct(35)          #Lcm with 8
```

```
Out[102... '0o43'
```

```
In [103... oct(59)
```

```
Out[103... '0o73'
```

```
In [108... oct(64)
```

```
Out[108... '0o100'
```

```
In [109... oct(40)
```

Out[109... '0o50'

```
In [ ]: # Hexa Decimal
        # base is 16, values prints(0-9, & a-f)
        # o/p shows 0x
```

In [110... hex(30) # when we do division with 16 remainder is 14 but in hexa decimal "e

Out[110... '0x1e'

In [111... hex(25)

Out[111... '0x19'

```
In [ ]: # Decimal Number System
        # base is 10, values from 0-9
```

```
In [ ]: #Swapping
```

```
In [112... a =5
          b =8
```

```
In [113... a =b
          b =a
```

```
In [114... print(a)
          print(b)
```

8
8

```
In [117... a =5
          b =8
```

```
In [118... temp =a          # with 3rd variable we can swap
          a = b
          b = temp
```

```
In [119... print(a)
          print(b)
```

8
5

```
In [120... a =5
          b =8
```

```
In [121... a = a + b          #without using 3rd variable swapping is done
          b = a - b
          a = a - b
```

```
In [122... print(a)
          print(b)
```

8
5

In [125... `a,b = b,a`

In [126... `print(a)`
`print(b)`

8

5

In []: