

## Two Important Functions of File Handling

```
In [ ]: Two important functions of file handling:
        1.tell()
        2.seek()
```

### tell() Function

```
In [ ]: --> tell function is used to return current position of the cursor or file pointer.
```

```
Syntax:
        f.tell()
```

### Example

```
In [13]: f=open("www.txt", "r")
        print(f.read(4))    #999A
        print(f.tell())     #4
        print(f.read(5))    #rnavp
        print(f.tell())     #9

        #999ArnavPrasad  deepaliArnavPrasadShashankAbhishek

Out[13]: 9
```

### seek(n) Function

```
In [ ]: seek(n) -->seek function is used to change/move your cursor or file pointer in forward direction.
```

```
Syntax:
        f.seek(n)
```

```
In [16]: f=open("www.txt", "r")
        f.seek(5)
        print(f.read(4))    #999A
        print(f.tell())     #4
        print(f.read(5))    #rnavp
        f.seek(15)
        print(f.tell())     #9

        #999ArnavPrasaddeepaliArnavPrasadShashankAbhishek

        navP
        9
        rasad
        15
```

```
In [22]: with open("demo.txt", "w") as f:
        f.write("Learning Python is Easy")
```

```
In [23]: f=open("demo.txt", "r")
        print(f.read(5))
        print(f.tell())
        f.seek(10)
        print(f.read())
        print(f.tell())

        Learn
        5
        ython is Easy
        23
```

## Ternary Operators or conditional operator

```
In [ ]: It will simply check the condition and if the condition is true
        then it will execute and return data otherwise else data will be return.
        Syntax:
        x=firsrvalue if condition else second value

        if the if condtion is true then firstvalue will ve returned otherwsie second value will be returned.
```

```
In [24]: a,b=10,20
        x=30 if a>b else 40
        print(x)

        40
```

```
In [26]: #maximum of three number
        a=10
        b=60
        c=30
        x = a if a>b and a>c else b if b>c else c
        print(x)

        60
```

## Bitwise Operators

```
In [ ]: 1 Byte --> 8 bits
```

```
In [ ]: Steps:
        1.Convert the given integer into Binary
        2.Perform Bitwise Operator in it.
        3.Again convert the binary number into Decimal Format
```

```
In [ ]: & --> and
        | --> or
        ^ --> xor
        >> --> left shift
        << --> right shift
```

```
In [ ]: Bitwise operator are only applicable for integers and Boolean:
```

### and or and Xor

```
In [ ]: Bitwise and --> &
        if both bits are 1 then only result is 1 else result is 0

        4 --> 00000100
        5 --> 00000101

        & --> 00000100 --> 4

        Bitwise or --> |
        if atleast 1 bit is 1 then answer is 1 else answer is 0

        4 --> 00000100
        5 --> 00000101

        | --> 00000101 --> 5

        Bitwise XOR --> ^
        if bits are different then result is 1 else answer is 0

        4 --> 00000100
        5 --> 00000101

        ^ --> 00000001 --> 1
```

```
In [29]: print(4&5)
        print(4|5)
        print(4^5)
```

```
4
5
1
```

### left shift(<<)

```
In [ ]: print(10<<2)
        10 --> 00001010
              00101000

        Steps:
        1.First convert the given number into 8-bit binary number
        2.In left shift remove left side bits based on the shifting value
        3.After removing the bits from left side add 00 bits at right side
        4.Convert binary bits into Decimal
```

```
In [30]: 10<<2
```

```
Out[30]: 40
```

```
In [31]: 20<<3
```

```
Out[31]: 160
```

```
In [ ]: 20<<3
```

```
20 - ->      1 0 1 0 0
              1 0 1 0 0 0 0 0 --> 160
```

### Right shift (>>)

```
In [ ]: 10>>2

        10 --> 00001010
              00000010

        15>>3
        15 --> 00001111
              00000001

        Steps:
        1.First convert the given number into 8-bit binary number
        2.In right shift remove right side bits based on the shifting value
        3.After removing the bits from ride side add 00 bits at left side
        4.Convert binary bits into Decimal
```

```
In [34]: 15>>3
```

```
Out[34]: 1
```

```
In [1]: 10>>2
```

```
Out[1]: 2
```

```
In [ ]: 
```