

30 jan 2025

BitwiseOperators

```
In [2]: 3 and 10
```

```
Out[2]: 10
```

```
In [6]: 3 & 10
```

```
Out[6]: 2
```

```
In [4]: 5 or 10
```

```
Out[4]: 5
```

```
In [8]: 5 | 10
```

```
Out[8]: 15
```

```
In [10]: bin (5 | 10)
```

```
Out[10]: '0b1111'
```

```
In [14]: bin (5 or 10)
```

```
Out[14]: '0b101'
```

```
In [12]: bin (3 & 10)
```

```
Out[12]: '0b10'
```

```
In [16]: bin (3 and 10)
```

```
Out[16]: '0b1010'
```

```
In [18]: not 10
```

```
Out[18]: False
```

```
In [20]: not 0
```

```
Out[20]: True
```

```
In [22]: not 1
```

```
Out[22]: False
```

```
In [24]: # LEFT SHIFT - (Loose by two digit)
```

```
In [30]: 10<<2 # 10 = 1010.00 , 10 << 2 =101000.0
```

Out[30]: 40

In [32]: `bin(10<<2)`

Out[32]: '0b101000'

In [34]: *# Right SHIFT - (Loose by two digit)*

In [36]: `10>>2 # 1010.00, 10 >> 2 =10.00`

Out[36]: 2

In []: