

# Python Bitwise Operator - Toán tử với Bit trong Python

Các toán tử thực hiện trên `bit` trong Python

Operator	Description	Example
& Binary AND	AND	(a & b) (means 0000 1100)
Binary OR	OR	(a   b) = 61 (means 0011 1101)
^ Binary XOR	XOR	(a ^ b) = 49 (means 0011 0001)
~ Binary Ones Complement	It is unary and has the effect of 'flipping' bits.	(~a ) = -61 (means 1100 0011 in 2's complement form due to a signed binary number.
<< Binary Left Shift	Dịch bit sang trái	a << 2 = 240 (means 1111 0000)
>> Binary Right Shift	Dịch bit sang phải	a >> 2 = 15 (means 0000 1111)

## - Ví dụ:

```
a = 60          # 60 = 0011 1100
b = 13          # 13 = 0000 1101
c = 0

c = a & b;      # 12 = 0000 1100
print "Line 1 - Value of c is ", c

c = a | b;      # 61 = 0011 1101
print "Line 2 - Value of c is ", c

c = a ^ b;      # 49 = 0011 0001
print "Line 3 - Value of c is ", c

c = ~a;         # -61 = 1100 0011
```

```
print "Line 4 - Value of c is ", c
```

```
c = a << 2;          # 240 = 1111 0000
```

```
print "Line 5 - Value of c is ", c
```

```
c = a >> 2;          # 15 = 0000 1111
```

```
print "Line 6 - Value of c is ", c
```

```
Line 1 - Value of c is 12
```

```
Line 2 - Value of c is 61
```

```
Line 3 - Value of c is 49
```

```
Line 4 - Value of c is -61
```

```
Line 5 - Value of c is 240
```

```
Line 6 - Value of c is 15
```

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