

## Assigning Values and Bitwise Operations:

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Assignment Operators

Bitwise Operators

```
>>> var = var + 10
>>>
>>> var
20
>>> var += 10
>>> var
30
>>> var *= 10
>>> var
300
>>> var /= 10
>>> var
30.0
>>> var **= 10
>>> var
5904900000000000.0
>>> var %= 3
>>> vcar
Traceback (most recent call last):
  File "<stdin>", line 1, in <module>
NameError: name 'vcar' is not defined
>>> var
0.0
```

```

>>> a = 0b11110000
>>> b = 0b11001100
>>> print(bin(a) + "\n" + bin(b))
0b11110000
0b11001100
>>> a
240
>>> 

```

```

>>> print(bin(a) + "\n" + bin(b))
0b11110000
0b11001100
>>> bin(a&b)
'0b11000000'
>>> bin(a|b)
'0b11111100'
>>> bin(a^b)
'0b111100'
>>> c1 = 0b00111100
>>> c2 = 0b111100
>>> c1
60
>>> c2
60
>>> 

```

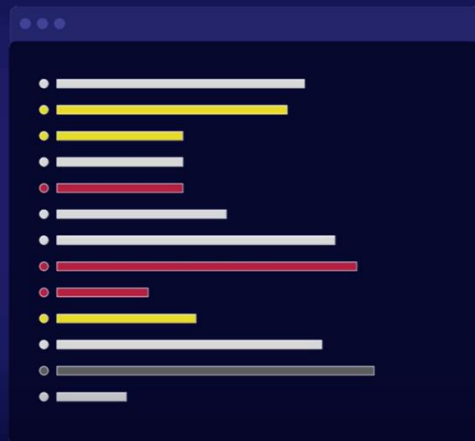
```

0b11001100
>>> print(bin(b) + "\n" + bin(b >> 3) + "\n" + "0b00011001")
0b11001100
0b11001
0b00011001
>>> bin(a << 2)
'0b1111000000'
>>> 0b11110000
240
>>> 0b1111000000
960
>>> bin(b)
'0b11001100'
>>> b
204
>>> bin(b >> 3)
'0b11001'
>>> b >> 3
25
>>> b >> 4
12
>>> b >> 5
6
>>> b << 5

```

## Performing Logical Operations and Operator Precedence

[ Logical Operators ]
[ Identity Operators ]
[ Membership Operators ]
[ Operator Precedence ]



```
>>> a = 2
>>> b = 3
>>> c = 5
>>> (a<b) or (b>c)
True
>>> (a<b) and (b>c)
False
>>> (a<b) and (b<c)
True
>>> Not((a<b) and (b<c))
Traceback (most recent call last):
  File "<stdin>", line 1, in <module>
NameError: name 'Not' is not defined
>>> not((a<b) and (b<c))
False
>>>
```

Identity Operators:

```
>>> n1 = 3
>>> n2 = 3
>>> n3 = 4
>>> n1 is n2
True
>>> n1 is n3
False
>>> n1 is not n3
True
>>>
```

## Membership Operators

```
>>> list = [3535, 25, 2, 242]
>>>
>>> n1 = 25
>>> n1 in list
True
>>> n1 not in list
False
>>> []
```