

Logical Operators

- **and** : Returns True if both conditions are true
- **or** : Returns True if one of the statements is true
- **not** : Reverse the result, returns False if the result is true

Example:

```
>>> a = 10
>>> b = 20
>>> if (a > 5 and a < 20):
>>>     print("both conditions are true")
>>> if (b < 30 or b > 50):
>>>     print("one of the conditions is true")

>>> x = 5
>>> print(not(x > 3 and x < 10))
```

Logical Operator

AND

```
[3]: numb = int(input('this is the number- '))
      if numb>5 and numb<=100:
          print('Small number')
      else:
          print('Large Number')
```

```
this is the number- 106
Large Number
      ^
```

```
[9]: numb = int(input('this is the number- '))
      if numb%2==0 or numb%5==0:
          print('done')
      else:
          print('Error')
```

```
this is the number- 17
Error
```

NOT

```
[11]: x=6  
      print(x>5)
```

True

```
[13]: x=6  
      print(not(x>5))
```

False