

```
1  # if
2  a = 5
3  b = 10
4  if a>b :
5      print("a more than b")
6
7  # if .. else
8  a = 5
9  b = 10
10 if a>b :
11     print("a more than b")
12 else:
13     print("b more than a")
14 print("out of if")
15
16 # if ...elif .. else
17 a = 10
18 b = 10
19 if a>b :
20     print("a more than b")
21 elif a<b:
22     print("b more than a")
23 else:
24     print("a and b are equal")
25
26 print("out of if")
27
28 # nested if (example 1)
29 a = 10
30 b = 10
31 if a>b :
32     print("a more than b")
33 else:
34     if b>a :
35         print("b more than a")
36     else:
37         print("they are equal")
38     print("something")
39
40 print("out of if")
41
42 # nested if (example 2)
43 a = 2
44 if a > 5:
45     print("above 5")
46     if a>15:
47         print("and above 15")
48     else:
49         print("but not above 15")
50
```

```
51 # operations within if:
52 # to get a number between two integers:
53 x = 8
54 if x>0:
55     if x<10:
56         print("x is between 0 and 10.")
57
58 if x<10:
59     if x>0:
60         print("x is between 0 and 10.")
61
62 if x >0 and x<10: #checks both conditions, both must be true to execute the if
63     print("it is between 0 and 10.")
64
65 # check if it's less than 10, more than 0, and not equal to 5:
66 if x<10 and x>0 and x≠5: # we can use "and" operator as much as we need
67     print("it meets all conditions")
68
69 # or operator:
70 a = 70
71 b = 40
72 c =30
73 if (a < c) or (b < c): # needs only one condition to return true for the if to
74     be executed
75     print("at least one of a or b is less than c")
76 else:
77     print("both are more than c.")
```