- Chained Conditionals

Sometimes there are more than two possibilities and we need more than two branches..

elif → abbreviation → "else if"

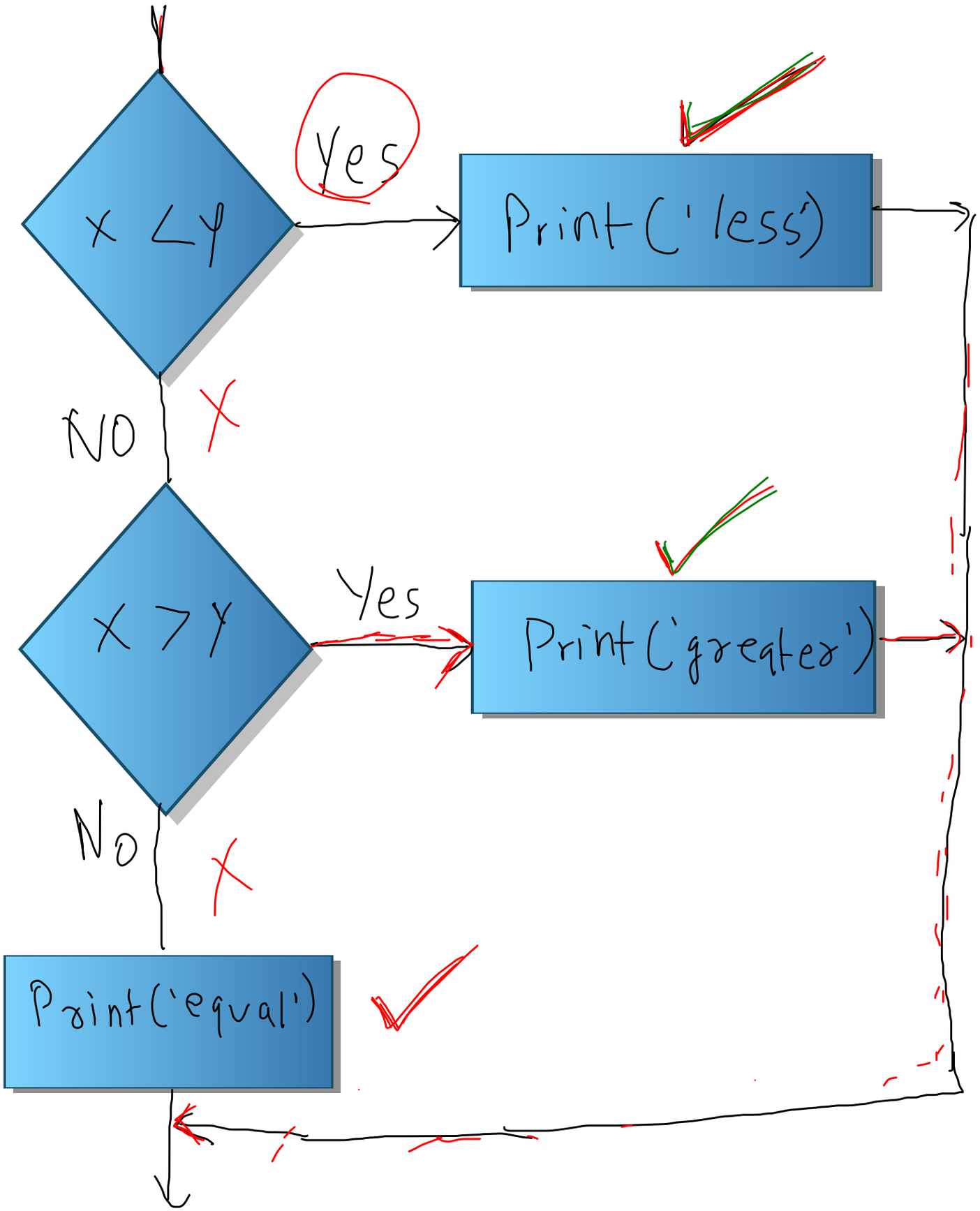
↳ Reserved word

```
if x < y:
    print ("x is less than y")
elif x > y:
    print ("x is greater than y")
else:
    print ("x and y are equal")
```

→ There is no limit on the number of elif statements. If there is an else clause, it has to be at the end, but there doesn't have to be one.

```
if choice == 'a':
    print('Bad guess')
elif choice == 'b':
    print('Good guess')
elif choice == 'c':
    print('Close, but Not correct')
```

If -then -Elseif -Logic

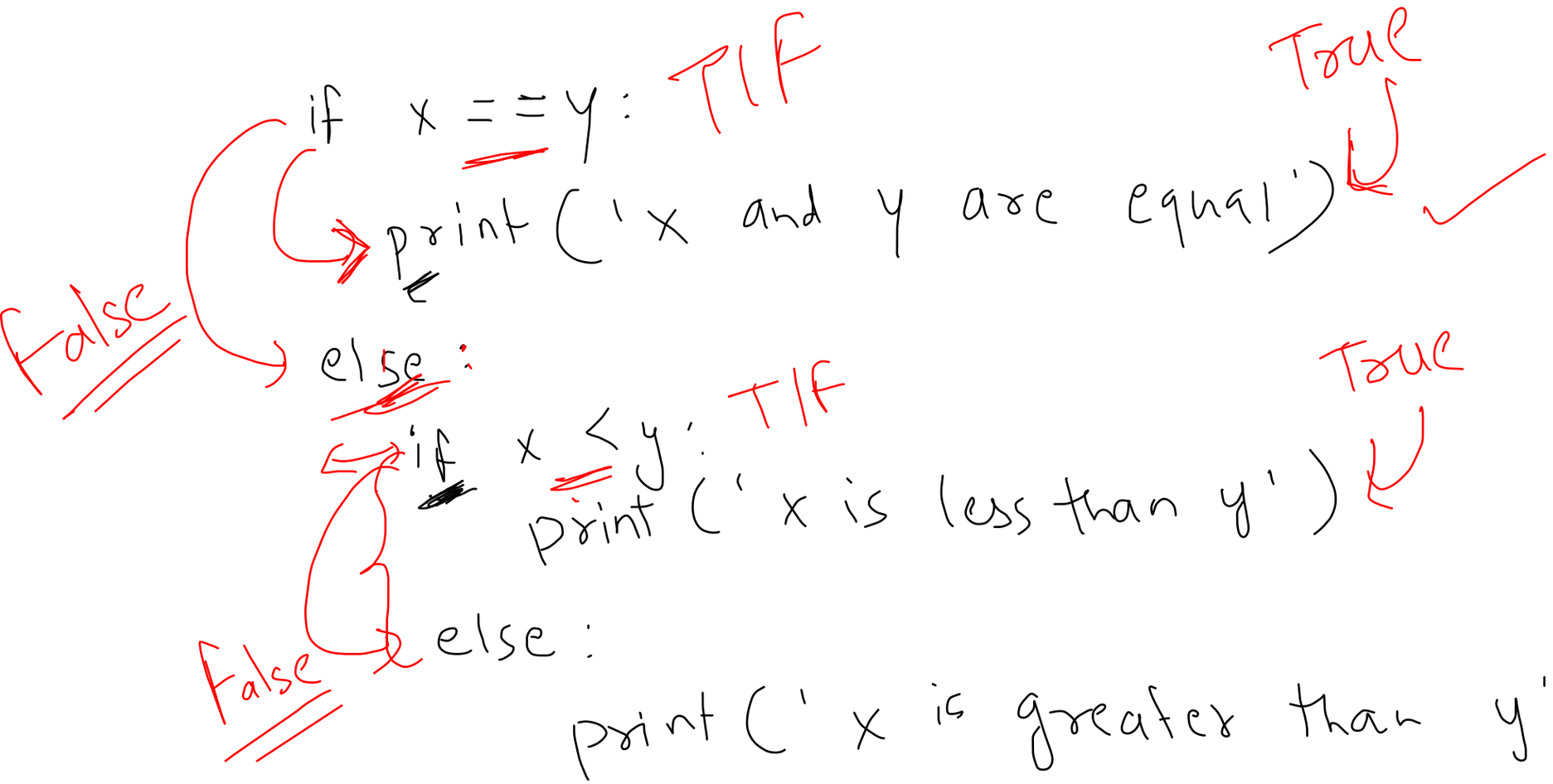


Each condition is checked in order. If the first is false, the next is checked, and so on. If one of them is true, then corresponding branch executes, and the statement ends. Even if more than one condition is true, only the first true branch executes.

Nested Conditional

condition inside another condition.

```
if x == y:
    print('x and y are equal')
else:
    if x < y:
        print('x is less than y')
    else:
        print("x is greater than y")
```



The outer conditional contains two branches. First branch, contains simple statement. The second branch contains another if statement, which has two branches of its own.

Those two branches are both simple statements.

Code –

```
if 0 < x :
    if x < 10 :
        print ('x is a positive - single digit no')
```

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x = 45, 0 < 45 ✓ 45 < 10 ✗ (X)

x = 2, 0 < 2 ✓ 2 < 10 ✓

x = -1, 0 < -1 ✗

Same effect with AND Operator

F f

```
if 0 < x and x < 10 :
    print('x is positive single digit No')
```

T/T