

There are different [types](#) of variables. You already now [Strings, Numbers and Lists](#). (In other programming languages, lists are called arrays.) [Booleans](#) are another type: There are only 2 possibilities: [True or False](#).

[Weird](#): In programming “equal” is written as `==` (`4==4` or `“Hermione”==“Hermione”`)  
A single `=` is an assignment, giving a value to a variable (`name = “Hermione”, hair = “blonde”`)

`==`    equal  
`!=`    not equal  
`<`    left side smaller than right side ( `4 < 5` )  
`>`    left side is bigger than right side ( `5 > 4` )

#Task 5:

Colour every expression that can only be True or False.  
Hint: Look for statements starting with “if” or “while”

```
# guess the number
import random

guessesTaken = 0

print('Hello! What is your name?')
myName = input()

number = random.randint(1, 20)
print('Well, ' + myName + ', I am thinking of a number between 1 and 20.')

while guessesTaken < 6:
    print('Take a guess.')
    guess = input()
    guess = int(guess)

    guessesTaken = guessesTaken + 1

    if guess < number:
        print('Your guess is too low.')

    if guess > number:
        print('Your guess is too high.')

    if guess == number:
        break

if guess == number:
    guessesTaken = str(guessesTaken)
    print('Good job, ' + myName + '! You guessed my number in ' + guessesTaken + ' guesses!')

if guess != number:
    number = str(number)
    print('Nope. The number I was thinking of was ' + number)
```