

Different **types** of variables can do different things. For example, if you **+** strings or **+** numbers, this will have a different result.

Example of **string + (string concatenation or cat)**:

```
name = "Hermione" + " " + "Mae" + " " + "Lovelace"
print(name)                                >> Hermione Mae Lovelace
print("My name is: " + name)              >> My name is Hermione Mae Lovelace
```

Example of **number + (addition)**:

```
age = 3 + 2 + 2
print(age)                                >> 7
```

#Task 7:

Colour all the string **+** (string cats) in one colour and the number **+** (number additions) in a different colour.

What do you think will be the result of `print("3"+"2"+"2")`. Try it in the Terminal.

```
# 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)
```