Comparison operators

==	Equal to
!=	Not equal to
<	Less than
<=	Less than or equal to
>	Greater than
>=	Greater than or equal to

Logical Operators

NOT
AND
OR

Arithmetic Operators

+	Addition e.g. x=6+5 gives 11
-	Subtraction e.g. x=6-5 gives 1
*	Multiplication e.g. x=12*2 gives 24
/	Division e.g. x=12/2 gives 6
MOD	Modulus e.g. 12MOD5 gives 2
DIV	Quotient e.g. 17DIV5 gives 3
^	Exponentiation e.g. 3^4 gives 81

Term	What it means	How to do it in Python
Variable	Something you can give a value to and then change it at other times in the program.	**number** = 0 #number is a variable **name** = "Rhiannon" # name is a variable

Input/Output	Getting input from the keyboard or outputting something to the screen.	name = input("Enter your name: ") # input
		number = int(input("Enter a number: ")) #input
		print(name)

Concatenation	Joining strings together	print("Name:" + " " + name) print("Number:" + " " + str(number)

Selection	Where there is a choice point in the program design and an if statement is used to create more than one possible pathway.	if entry == "a":
		  print("You selected A")
		else if entry=="b":
		  print("You selected B")
		else:
		  print("Unrecognised ")

Assignment	Where a variable is given a value	number = **56** #number is assigned the value 56
		Name = **"Rhiannon"** # name is assigned the value Rhiannon

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<td>Repetition and Iteration</td>
<td>Repetition means looping over a block of code a given number of times or whilst a condition is true.

Iteration is very similar to repetition, but it is performed over every item in a data structure, for example, each letter in a string or each item in a list.</td>
<td>Condition controlled loops

While loops

counter = 0
password = “cat”
while counter < 3 AND password != guess:
  guess = input()
  if password == guess:
  print(“correct”)

  else:
  print('Try Again")
  counter = counter + 1</td>
<td>Count controlled loops

For loops

for i in range(5): #Repeat 5 times
  print(“Hello”)

Iteration: Looping through a string and counting the number of letter A’s:
sentence = “i love computer science”
count = 0
for i in range (0,len(string):
  if i == ‘a’:
  countA = countA + 1

Alternative:
for letter in sentence:
  #do something</td>
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