

1.What are the two values of the Boolean data type? How do you write them?

True and False are two types of boolean values

In [1]:

```
print(True,False)
```

True False

2. What are the three different types of Boolean operators?

AND, OR and NOT

3. Make a list of each Boolean operator's truth tables (i.e. every possible combination of Boolean values for the operator and what it evaluate).

In [4]:

```
print(True or False)
print(True and False)
print(True or True)
print(False or False)
print(True and True)
print(False and False)
```

True
False
True
False
True
False

4. What are the values of the following expressions?

(5 > 4) and (3 == 5) not (5 > 4) (5 > 4) or (3 == 5) not ((5 > 4) or (3 == 5)) (True and True) and (True == False)
(not False) or (not True)

False,False,True,False,False,True

5. What are the six comparison operators?

<,>,<=,>==,!=

6. How do you tell the difference between the equal to and assignment operators?Describe a condition and when you would use one.

We use == symbol for comparison and = symbol for assignment operator.

In [6]:

```
a = 10
```

In [7]:

```
if a==10:  
    print(True)
```

True

7. Identify the three blocks in this code:

two if blocks and one else block

In [9]:

```
spam = 0  
if spam == 10:  
    print('eggs')  
if spam > 5:  
    print('bacon')  
else:  
    print('ham')  
    print('spam')  
    print('spam')
```

ham
spam
spam

8. Write code that prints Hello if 1 is stored in spam, prints Howdy if 2 is stored in spam, and prints Greetings! if anything else is stored in spam.

In [10]:

```
spam = 0  
if spam == 1:  
    print('Hello')  
elif spam == 2:  
    print('Howdy')  
else:  
    print('Greetings!')
```

Greetings!

9.If your programme is stuck in an endless loop, what keys you'll press?

Ctrl + C

10. How can you tell the difference between break and continue?

Break is used to come out of the loop whereas continue is used to skip the current iteration execution.

11. In a for loop, what is the difference between range(10), range(0, 10), and range(0, 10, 1)?

basically all are same where it prints values from 0 to 9 with step size of 1

12. Write a short program that prints the numbers 1 to 10 using a for loop. Then write an equivalent program that prints the numbers 1 to 10 using a while loop.

In [12]:

```
for i in range(1,11):  
    print(i)
```

1
2
3
4
5
6
7
8
9
10

In [14]:

```
i =1  
while i<=10:  
    print(i)  
    i += 1
```

1
2
3
4
5
6
7
8
9
10

13. If you had a function named bacon() inside a module named spam, how would you call it after importing spam?

```
import spam
```

```
spam.bacon()
```

In []: