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

True (1) and false (0)

**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 ).**

## AND

|  |  |  |
| --- | --- | --- |
| **A** | **B** | **Q** |
| 0 | 0 | 0 |
| 0 | 1 | 0 |
| 1 | 0 | 0 |
| 1 | 1 | 1 |

## OR

|  |  |  |
| --- | --- | --- |
| **A** | **B** | **Q** |
| 0 | 0 | 0 |
| 0 | 1 | 1 |
| 1 | 0 | 1 |
| 1 | 1 | 1 |

NOT

|  |  |
| --- | --- |
| **A** | **Q** |
| 1 | 0 |
| 0 | 1 |

**4. What are the values of the following expressions?**

**(5 > 4) and (3 == 5) -------------**False

**not (5 > 4) -------------**False

**(5 > 4) or (3 == 5)------------**True

**not ((5 > 4) or (3 == 5))-----------------------**False

**(True and True) and (True == False)-------------------**False

**(not False) or (not True)-------------------------**True

**5. What are the six comparison operators?**

* equal to,
* not equal to,
* greater than,
* greater than or equal to,
* less than,
* less than or equal to

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

* The “=” is an assignment operator is used to assign the value on the right to the variable on the left.
* The '==' operator checks whether the two given operands are equal or not.

**7. Identify the three blocks in this code:**

**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.**

spam = input()

if spam == "1":

print('Hello')

elif spam == "2":

print('Howdy')

else:

print('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 statement*** *stops the loop in which the statement is placed.*
* ***continue statement*** *skips a single iteration in a loop.*

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

**range(10) -** Generate numbers between 0 to 10

**range(0,10)-** start=0and stop=10. It will generate integers starting from the start=0 number to stop=-1

**range(0,10,1)-** stepSpecify the increment,Each next number in the sequence is generated by adding the step value to a preceding number. The default value is 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.**

**Using for loop:**

fori inrange(1, 11):

print(i)

**Using While Loop:**

i = 1

while(i<=10):

print(i)

i += 1

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

Module a in spam.py:

def bacon():

print('Hi')

Module b in b.py uses module a:

import spam

a.bacon() # prints "Hi"