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

* True
* False

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

* AND
* OR
* 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 ).**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **CONDITION 1** | **CONDITION 2** | **AND** | **OR** | **NOT** |
| false | false | false | false | true |
| false | true | false | true | true |
| true | false | false | true | false |
| true | true | true | true | false |

**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?

* <
* >
* <=
* >=
* ==
* !=

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

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

**spam = 0**

**if spam == 10: # 0 == 10 condition failed**

**print('eggs') # If condition failed so no printing**

**if spam > 5: # 0 > 5 condition failed**

**print('bacon') # If condition failed so no printing**

**else: # Finally go to else statement check the condition Finally Printing**

**print('ham')**

**print('spam')**

**print('spam')**

Output:

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 = int(input("Enter a Value"))

if spam == 1:

print("Hello")

if spam == 2:

print("Howdy")

else:

print("Greetings!")

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

Shutdown the respective IDE

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

“break” → exit a loop

“contitnue” → skip the current iteration of a loop, i.e. subsequent code in loop will not be executed (but continue the loop)

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

range(10) – 0,1,2,3,4,5,6,7,8,9

range(0, 10) - 0,1,2,3,4,5,6,7,8,9

range(0,10,1) - 0,1,2,3,4,5,6,7,8,9

Condition different but giving all are same result only.

**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.**

For loop:

for i in range(1,11):

print(i)

while loop:

i = 1

while i < 11:

print(i)

i = i+1

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

def bacon(spam):

print("Hello "+spam)

bacon("Bala")

Output:

Hello Bala