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

**Answer: True and False**

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

**Answer:** AND operator,OR operator,NOT operator

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 ).

**Answer:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| A | B | A AND B | A OR B | Not A |
| 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)

**Answer:** False

not (5 > 4)

**Answer:** False

(5 > 4) or (3 == 5)

**Answer:** True

not ((5 > 4) or (3 == 5))

**Answer:** False

(True and True) and (True == False)

**Answer:** False

(not False) or (not True)

**Answer:** True

5. What are the six comparison operators?

**Answer:** <,<=,>,>=,==,!=

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

**Answer:** Equal to is used in conditional statement and assignment is used to store some value in variable. Assignment operator is used when we want to store some value in variable and Equal to is used when we need to do some operation or print some statement based on condition.

7. Identify the three blocks in this code:

**Answer:**

spam = 0

if spam == 10:

print('eggs')----Block 1

if spam > 5: ----Block 2

print('bacon')

else: ----Block 3

print('ham')

print('spam')

print('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.

**Answer:**

Spam=0

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?

**Answer:** Restart kernel

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

**Answer:** break is used to come out of loop and continue is used when based on some condition we want continue in loop.

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

**Answer:** All will give same value 0,1,2,3,4,5,6,7,8,9

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.

**Answer:**

For i in range(1,11):

Print(i)

a=1

while a<11:

print(a)

a+=1

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

**Answer:**

import spam

spam.bacon()