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

Ans. True, False

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

Ans. 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).

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| A | B | And | Or | Not A |
| TRUE | TRUE | **TRUE** | **TRUE** | FALSE |
| FALSE | FALSE | FALSE | FALSE | TRUE |
| TRUE | FALSE | FALSE | **TRUE** | FALSE |
| FALSE | TRUE | FALSE | **TRUE** | TRUE |

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?

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

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

Ans – When using for assignment, we have to use = one time while for doing equal to we have to use two ==.

Assignment – name = ‘Prakash’

Equal to = len(name) == 7

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')

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('please provide number'))

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?

Ans - I

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

Ans. Break is used to break the while loop with condition. And continue is used to continue the loop if condition is fulfilled.

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

Ans. Range(10) – will take 0 as default starting point and print till 9

Range(0, 10) – first arg is starting point and will print till 9

Range(0,10,1) - first arg is starting point, second arg is (end point-1) and third arg is interval.

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.

Ans 1. for i in range(1,11):

print(i)

Ans 2. i = 0

while i < 10:

i = i+1

print(i)

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

- yes