1. What are the Boolean data type's two values? How do you go about writing them?

The Boolean data type's two values are True and False.

odd = True

If n%2 ==0:

Odd =False

Print(“Number is even”)

Else:

Print(“Number is odd”)

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

Three different types of **Boolean operators** are the words "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 OR

|  |  |  |
| --- | --- | --- |
| I/P 1 | I/P 2 | O/P |
| 1 | 1 | 1 |
| 1 | 0 | 0 |
| 0 | 1 | 0 |
| 0 | 0 | 0 |

|  |  |  |
| --- | --- | --- |
| I/P 1 | I/P 2 | O/P |
| 1 | 1 | 1 |
| 1 | 0 | 1 |
| 0 | 1 | 1 |
| 0 | 0 | 0 |

NOT

|  |  |
| --- | --- |
| I/P | O/P |
| 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 different types of reference operators?

6. How do you tell the difference between the equal to and assignment operators?

Equal to : “ ==” is used when we want to check a value in if statement. The value will not be stored in the variable.

Assignment operators : “=” is used to assign a value to a variable.

7. Describe a condition and when you would use one.

Equal to : “ ==” is used when we want to check a value in if statement.

Eg if a == 10: then execute following statement.

Print(a)

Assignment operators : “=” is used to assign a value to a variable.

Eg a=10, the value will not be stored in the variable a.

8. Recognize the following three blocks in this code:

spam = 0

if spam == 10:

print('eggs')

if spam > 5:

print('bacon')

else:

print('ham')

output: **ham**

9. Create a programme that prints. If 1 is stored in spam, prints Hello; if 2 is stored in spam, prints Howdy; and if 3 is stored in spam, prints Salutations! if there's something else in spam.

if spam == 1:

print('Hello')

elif spam ==2:

print('Howdy')

elif spam ==3:

print('HI!')

else:

print('Salutations')

10. If your programme is stuck in an endless loop, what keys can you press?

We can press Ctrl + C .

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

Beak statement ends the loop in which it is used. Continue statement skips the current loop and executes next loops.

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

All are same. Gives values 0 to 9.

13. Using a for loop, write a short programme that prints the numbers 1 to 10 Then, using a while loop, create an identical programme that prints the numbers 1 to 10.

for i in range(11):

   print(i)

i = 1

while i<=10:

   print(i)

   i = i+1

14. If you had a bacon() function within a spam module, what would you call it after importing spam?