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

True & False (t and f should be capital because python is case sensitive language)

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 ).

|  |  |  |  |
| --- | --- | --- | --- |
| **value 1** | **value 2** | **operator** | **output** |
| FALSE | FALSE | AND | FALSE |
| TRUE | TRUE | AND | TRUE |
| TRUE | FALSE | AND | FALSE |
| FALSE | FALSE | OR | FALSE |
| TRUE | TRUE | OR | TRUE |
| TRUE | FALSE | OR | TRUE |
| FALSE |  | NOT | TRUE |
| TRUE |  | NOT | FALSE |

4. What are the values of the following expressions?

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

not (5 > 4) = True

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

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

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

(not False) or (not True)

5. What are the six comparison operators?

OPERATOR NAME

== equal

!= not equal

> greater than

< less than

>= greater than equal to

<= less than 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.

Equal(==) operator is used to compare two values while assignment(=) operator is use to store value in a variable.

To store a value in variable arvind we = i.e

arvind = 10

but for comparison of arvind to other value we have to == i.e

if arvind == 20:  
 print("same value")  
else:  
 print("wrong value")

7. Identify the three blocks in this code:

spam = 0 ---🡪 assignment operator

if spam == 10: ---🡪 equal operator

print('eggs')

if spam > 5: ---🡪 greater than operator

print('bacon')

else:

print('ham')

print('spam')

print('spam')

result of code is :

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("num: "))  
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**

The **break** statement is used to terminate the loop or statement in which it is present. After that, the control will pass to the statements that are present after the break statement, if available. If the break statement is present in the nested loop, then it terminates only those loops which contains break statement.

**Continue statement**

The  **continue** statement is opposite to that of break statement, instead of terminating the loop, it forces to execute the next iteration of the loop. When the continue statement is executed in the loop, the code inside the loop following the continue statement will be skipped and the next iteration of the loop will begin.

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

There is no difference .all range give same result

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 i in range(1,11):  
 print(i)*

i=1  
while i<=10:  
 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?

Import spam

Spam.bacon()