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

*Two Boolean data types are True and False .We write them as :*

*True*

*False*

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

*Boolean operators are:*

*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 ).

*And:*

|  |  |  |
| --- | --- | --- |
| *True* | *True* | *=True* |
| *True* | *False* | *=False* |
| *False* | *True* | *=False* |
| *False* | *False* | *=False* |

*OR:*

|  |  |  |
| --- | --- | --- |
| *True* | *True* | *=True* |
| *True* | *False* | *=True* |
| *False* | *True* | *=True* |
| *False* | *False* | *=False* |

*Not:*

|  |  |
| --- | --- |
| *True* | *=False* |
| *False* | *=True* |

4. What are the values of the following expressions?

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

not (5 > 4) Ans=False

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

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

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

(not False) or (not True) Ans=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.

*Assignment operator is used to assign values to a variable. It is indicated by “=”.*

*A=3*

*Equal to operator is used to compare two values whether they are equal or not ,it is indicated by “==”.*

*A==B*

*A is compared with B*

7. Identify the three blocks in this code:

spam = 0

if spam == 10:

print('eggs') #no indentation given

if spam > 5:

print('bacon') #no indentation given

else:

print('ham') #no indentation given

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.

*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 breaks us out of loop. Continue statement skips that iteration of the loop.*

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

*range(10), range(0, 10), and range(0, 10, 1): Goes from 0 to 9.*

*Only difference is the number of parameters passed to each function.*

*range(10)[One parameter Upper limit given], range(0, 10)[Two parameter Upper and lower limit given], and range(0, 10, 1)[Three parameters :Upper limit, lower limit and steps given]*

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.

Program using “For loop”:

*for X in range(1,11):*

*print(X)*

Program using while loop:

*x=1;*

*while x<=10:*

*print(x)*

*x+=1;*

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

*spam.bacon()*