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

Ans : The two values are True and False.

Bool = True

Bool = False

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

Ans : 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 (0 = False and 1 = True) OR NOT

|  |  |  |
| --- | --- | --- |
| 0 | 0 | 0 |
| 0 | 1 | 0 |
| 1 | 0 | 0 |
| 1 | 1 | 1 |

|  |  |  |
| --- | --- | --- |
| 0 | 0 | 0 |
| 0 | 1 | 1 |
| 1 | 0 | 1 |
| 1 | 1 | 1 |

|  |  |
| --- | --- |
| 0 | 1 |
| 1 | 0 |

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 : Assignment operator is used to assign the value to a variable whereas equal to is used to compare two variables/values.

Ex: If we have 2 variables A and B and we have to give them some value to perform the addition operation then we use assignment operator i.e., A = 5 and B = 9.

If we have to compare if a variable/value is equal to something we can use the equal to operator.   
If A == 2 :

print (“Hi”)

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 = input ()

if spam == 1 :

print ("spam")

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?

Ans: Break statement breaks the loop at the place where its situated whereas the continue statement skips the current iteration in a loop

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

Ans : All are same

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 :

//Prog 1:

for i in range (1,11):

print (i)

//Prog 2 :

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()