

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

ANS:- true and false are two boolean data types and we write them with first letter capital and rest in small. eg. 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).

ANS:- True and True is **True**

True and False is **False**

False and True is **False**

False and False is **False**

True or True is **True**

True or False is **True**

False or True is **True**

False or False is **False**

not False is **True**

not True is **False**

4. What are the values of the following expressions?

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

not (5 > 4)

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

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

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

(not False) or (not True)

ANS:- 1. False

2. False

3.True

4. False

5.False

6.True

5. What are the six comparison operators?

ANS:- six comparison operator are (= , == , != , <= , >= , > , <)

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

ANS:- == it is an equal to operator where as = is an assignment operator that assigns value to variable.

Eg. a== 10

a+=10

print(a)

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')
```

ANS:-

```
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.

ANS:-

```
spam = int(input("enter the no.(1/2/3):"))
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?

ANS- CTRL-C to stop program stuck in endless loop.

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

ANS:- The break statement results in the termination of the loop, it will come out of the loop and stops further iterations. The continue statement stops the current execution of the iteration and proceeds to the next iteration.

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

ANS:- they all do the same thing in range(10) it starts from 0 till 9.in range (0,10) it specifically says to start from 0 and goes till 9. And in range (0,10,1)it explicitly tells the variable to jump by one digit.

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:

```
for i in range(1,11):  
    print(i)  
  
a =1  
while a<= 10:  
    print(a)  
    a= a+1
```

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

ANS:- spam.bacon()