

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

Ans: True or False

True==1 and False==0

Print(bool(1)) #True

Print(bool(0)) #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 evaluates to)?**

Ans:

X	Y	X AND Y	X OR Y
True	True	True	True
True	False	False	True
False	True	False	True
False	False	False	False

NOT	X	return
NOT	True	False
NOT	False	True

**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: Less than, Greater than, Less than or equal to, Greater than or equal to, Equal to, Not 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.**

Ans: = :- use for assign value. (Ex- X =5 now X value is 5 )

== :- use for comparing variable.(5 == 5 :- True)

**7. Identify the three blocks in this code:**

```
spam = 0           - first block
if spam == 10:
    print('eggs')
if spam > 5:
    print('bacon')
else:
    print('ham')
    print('spam')   - second block
    print('spam')   - third block
```

**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 number ="))
    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

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

Ans: **Break:** Terminates the execution of the current loop and passes the control over the next loop.

**Continue:** Skips the current iteration and executes the very next iteration in the loop.

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

```
Ans: for range (10) it will print 0 to 9 stops at 9 but here 0 is default [range(stop)].
    range (0,10) it will print 0 to 9 [range(start, stop)]
    range (0,10,1) it will print 0 to 9 with step of 1 [range(start, stop, step)].
```

**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: n = int(input("Enter a number : "))
    for i in range (1,n): # n = 11
        print(i , end=' ')
    i = 1
    while(i<=10):
        print(i ,end=' ')
        i += 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()