**Assignment-2**

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

**Ans-1** In Python, there are 2 values of Boolean data types, **True and False**. These values can be written with first word in capital letters, i.e. T and F and with the rest of the word in lowercase.

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

**Ans-2** In Python, the 3 types of Boolean are,

**and, or, and not**

**3. Make a list of each Boolean operator truth tables (i.e. every possible combination of Boolean**

**values for the operator and what it evaluates).**

**Ans-3** there are 10 Boolean operation, they are

1. False and False = False.
2. True and True = True.
3. True and False = False.
4. False and True = False.
5. not True = False.
6. not False = True.
7. False or True = True.
8. False or False = False.
9. True or True = True.
10. True or False = True.

**4. What are the values of the following expressions?**

**Ans-4**

* **(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-5** In Python, the 6 types of comparison operators are,

* > -Greater than
* < -Less than
* == -Equal to
* != -Not Equal to
* >= -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.**

**Ans-6**

== compares the two values and evaluates them in Booleans, on other side = is an assignment operator that stores a value in a variable. A condition is an expression that is used in a flow control statement that evaluates to a Boolean value.

**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-7**Everything in the if statement, as well as print('bacon') and print('ham'), make up the three blocks.  
  
print('eggs')  
if spam > 5:  
print('bacon')  
else:  
print('ham')  
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-8**

spam=int(input("enter the 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-9** Will press **CTRL-C** if we stuck in an endless loop

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

**Ans-10** The break statement will move the execution outside and will leave out of a loop. The continue statement will move the execution to the start of the loop.

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

**Ans-11** They all do the same thing. The range (10) call ranges from 0 up to (but not including) 10, range (0, 10) explicitly tells the loop to start at 0, and range (0, 10, 1) explicitly tells the loop to increase the variable by 1 on each iteration.

**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-12**

**Printing Number Using “for” Loop-**

for i in range (1, 11):

print(i)

**Printing Number Using “while “Loop-**

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?**

**Ans-13** we can call it by

spam.bacon()