**Assignment 5**

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

Ans- True and False are the two Boolean data type. True(1) and for False (0)

2. What are the three Boolean operators?

Ans- The three Boolean operators are --- OR,AND,NOT.

3. Write out the truth tables of each Boolean operator (that is, every possible combination of Boolean values for the operator and what they evaluate to).

Ans—Truth Table for AND operator

True and True = True

True and False = False

False and True = False

False and False = False

Truth Table for OR operator

True or True = True

True or False = True

False or True = True

False or False = False

Truth table for NOT operator

NOT True = False

NOT False = True

4. What do the following expressions evaluate to?

(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- ==(equal to) , !=(not equal to), <(greater than), >(less than), <=(greater than equal to), and >=(less than equal to).

6. What is the difference between the equal to operator and the assignment operator?

Ans- Equal to operator checks whether the given number is equal to or not to the other number while assignment operator is used to assign a value to a variable for eg- a=10. ‘=’ it is a assignment operator while ‘==’ it is a equal to operator.

7. Explain what a condition is and where you would use one.

Ans- A condition is an expression used in a flow control statement that evaluates to a Boolean value.