Name: Sai Likhitha Gunda Assignment on bit wise not operator and big integer data type

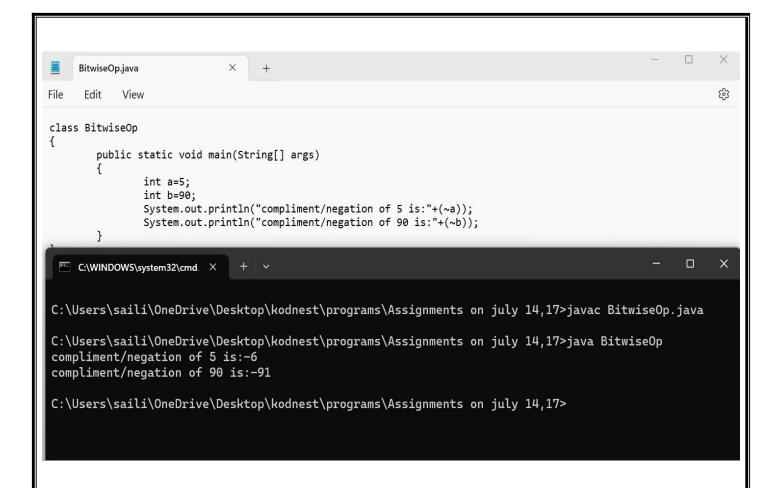
## Bit wise not Operator/Bit wise Compliment Operator(~):

Bitwise operator performs the operations at bit level of the operand and it Converts 0's to 1's and vice-versa in order to find bitwise complement. Bit wise operator is a unary operator, it contains only single operand.

In order to find the value of  $\sim$ 11 we need to find 2's complement of acquired value.

1 1 1 1 0 1 0 0 (-12) we finally found the value for 
$$\sim$$
11 i.e -12 1's complement 0 0 0 1 0 1 1 1 2's complement 1 0 0 0 0 1 1 0 0 (+12)

In simpler words we can say that 
$$\sim n = -(n+1)$$
  
 $\sim 11 = -(11+1) = -12$   
 $\sim 98 = -(98+1) = -99$  and so on.  
 $\sim (-11) = -(-11+1) = -10$ 



## **Big integer:**

Big integer is a class in java unlike the primitive integer data types (byte,short,int,long) it does not have range limit.

Big integer dynamically allocates the memory according to the requirement.It performs operations as long as memory is available.