**Assignment – 4**

**(Bitwise Operators)**

**29-01-2024**

Q1. Define two numbers v and n, where v is the original number and n is the shifting value. Then shift the value of v to left (<<) and right (>>) up to n **bits** and print the new values. Also use the >>> operator for right shift and observe the difference between >> and >>>.

Q2. Write a program to explain the use of (&, |, ^, ~) bitwise operators in Java. Define two numbers num1 and num2. Then store the result in num3 after using the operators given above. Print the value of num1, num2 and num3 to check the result.

Q3. Define two numbers and swap them without using third variable.

a. Use the bitwise ^ operator and show the numbers after swapping.

b. Restore the numbers by using (+, -) operator and show the numbers.