Task No 01:

Complete the table by solving the bitwise instruction of all Logical gates. Add the code and output of the logical gates to show solution of MASK BITS given in the table.

A table with black text

Description automatically generated

Solution:

Output:

Task No 02:

Write an MIPS assembly program that clears the 5th bit of a binary value stored in a register using the bitwise 'and' operation.

Solution:

Output:

Task No 03:

Create a program that sets the 3rd bit of a binary value in a register using the 'or' operation.

Solution:

Output:

Task No 04:

Can you demonstrate how to toggle the 4th bit in a binary value using the 'xor' operation in MIPS?

Solution:

Output:

Task No 05:

Implement a program that multiplies a binary value in a register by 32 (2^5) using the 'sll' operation and divides a binary value by 16 (2^4) using the 'srl' operation.

Solution:

Output: