# **Assignment #3 - Report**

# Verilog Design of Combinational and Sequential Unsigned Multipliers

### Group-51

Pritam Mallick (18CS10042) Smayan Das (18CS30011)

# Combinational Unsigned Binary Multiplier(Array Multiplier):

- 1. Hardware Requirements: 16 Half Adders, 10 Full Adders, 36 AND Gates, 24 I/O Ports, 84 nets
- 2. Maximum Speed of Operation: infinity

## **Sequential Unsigned Binary Multiplier (Left-Shift Version):**

- 1. Hardware Requirements: 37 cells, 27 I/O Ports, 112 nets
- 2. Maximum Speed of Operation: infinity

### Sequential Unsigned Binary Multiplier (Right-Shift Version):

- 1. Hardware Requirements: 53 cells, 27 I/O Ports, 170 nets
- 2. Maximum Speed of Operation: infinity