Theory of Automata

# Assignment: Turing Machine

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**Q1 Design a Turing Machine that performs Binary Multiplication**

Input Pattern: (Binary String)\*(Binary String)  
 Note: The 2nd Binary String(Multiplier) can be null, resulting in 0

**Q3 Design a Turing Machine that calculates the Factorial for a Unary number**

Input Pattern: (Unary String)  
 Note: Null String is defined as the number 0, where 0! = 1

.jff files are included, which can be interacted with using JFLAP Software. Labels have been added for ease of understanding.  
Screenshots of the files (Turing machines) are also attached.