CLASSICAL AND QUANTUM COMPUTING
EXERCISE V

1. Design a Moore machine which adds two binary numbers of the same length.

2. Design a Mealy machine which adds two binary numbers of the same length.

3. Describe how to create an equivalent Mealy machine from a Moore machine.

4. Design a Turing machine which subtracts a two's complement binary number from another of the same length.

In each case determine the relevant alphabets and a suitable formatting for the input.