Q1) S1 S2



0 0 0 0 0 0 0 1 1 0



1 0 0 1 0 0 1 0 0 1



1 0 0 1 0 1 1 0 0 0



0 0 1 1 1 0 0 0 0 0



0 0 1 1 1 0 0 1 1 1

This is m-adjacent as all the connected neighbors satisfy the condition for m-adjacency.



Q2). A. 4 Connected path does not exist

A close up of a logo

Description automatically generated

shortest 8 connected path length is 4

A drawing of a person

Description automatically generated

Shortest m connected path length is 4

A drawing of a person

Description automatically generated

Q2) B. Shortest 4 connected path length is 6

A close up of a logo

Description automatically generated

Shortest 8 connected path length is 4

A drawing of a person

Description automatically generated

Shortest m connected path length is 4

A drawing of a person

Description automatically generated

Q3) A. Block Diagram for EXTADD:

A screenshot of a cell phone

Description automatically generated

Q3) B.

A close up of a logo

Description automatically generated

Q4

A close up of a logo

Description automatically generated

Q5

A close up of a logo

Description automatically generated