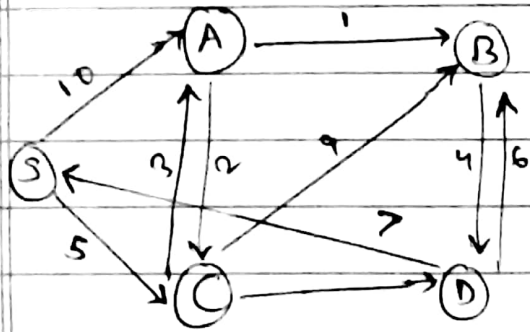
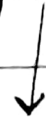


Date _____

Dijkstra's algorithm



Select a vertex and write the shortest path. Select shortest path, update with respect to other vertices till all paths are covered.

: (A) → A B C D S

0 1 2 ∞ ∞

Check whether

(B) → A B C D S

0 1 2 5 < ∞ ∞

A → X > A → B → X
A → B + B → X

(C) → A B C D S

0 1 2 4 < 5 ∞

(D) → A B C D S

0 1 2 4 4 + 7 < ∞

So : 0 1 2 4 11

(S) → 0 1 2 4 11

So find shortest paths from A to all vertices

A → A B C D S
0 1 2 4 11