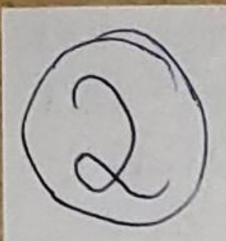
Computer Metworks Lab. Rutazent Kitik Rout 1BMIECSISI Botch -3 10/12/20. Program -9. import java. util. A; public class Dijkstra? Public Static void main (String [] args) { System. Out. Printen ("Enter no. of vertices"); Scarner Sc = new Scanner (System, in); not n = Sc. next Int(); int orr [][] mus int [n][n]; System, out. println (" Enter adjacent matrix"); for (int i=0; i<n; i++) { tor (int j = 0; j < n ; j++) { " cor [i][j] = Sc. next gat (); if Cor [i] [i] = = 0) OST [i] [j] = 999; Sprem. Out. println ("Enter source vertex") not Start = Sc. next ant (); dij kstra (n, orr, stort); public state void dijkstra (int n, intant 1777, int stort) { ind visited []= new int [n]; [[In] this over = [] thereof this int distance [] = new int [n]; int count 20; distance Estart] = 0; for (int i=0; i<n; i++){ visita CiJ 20; parent [i] = strat; if (i!= Stort) distance [i]2 arr [start][i];



```
while Count < n -1) {
     md min = 999, mdex = 0; i;
      for Ci20; ikb; i++){
         if Cuisited [i] = 1 de distance [i] < min) {
               min = distance [i];
                 index = i;
     VISHED Emder J= 1)
      for lint 120; jen; j++){
         if (visited [j] != 1 & artinden [j] != 99984 (
              distance Endur I + car Tirdex ITi I < distance [j]) }
                 distance [j] = distance linder & ear Tinder [j]
          3. g Parent [j] 2 index;
     count + +
System. Out. printen ("Distance & path from source are");
tur Cint 1:20; 1 < n ; 1++) {
    Supstem. out. printlem (i + ":"+ distance [i] + " " + start=");
    print Path ( parent, i);
    System. out. Britto ("In");
Bublic Static void mostle print Path Eint Parent [], int j ) &
      if (parent [j]==-1)
        return;
       printPath ( parent, parent [i])
       System, out printer (j + " -> ");
```