12/1/23 LAB-II Implant Dijkstra's algorithm to compute the shortest path for a given topologis. #include < stdiob > # julude <60 nio · h7 # define INFINITY 9999 # define MAX 10 void dijkska (int G[MAX][MAX], int u just steetunde); int main () int G[HAX][MAX] ,1,j, u,v; prints ("Ente us of verticus:"); Start ("1.d", ku); print ("In Enter the adjaceny makin ("). lor(i=0; iku; itt) 10 (j=0.; j(u;j++) Scarf (" /d ", kn); dijkska (G, 4, u); entin 0; 3 boid dijkstran (int G[MAX][MAX], int u, int standarde) int cost [MAX] [MAN] distance [MAX], pred [MAX]; jut visited [MAX], court, mindustace, hent mode, la (1=0; 1<u; i++) Cost [i][j] = INFINITY; else cost [i][j] = G[i][j]; los (i=0; i<u; i++)



distance [i] = Lost [start world [i]; pred [i] = Hart mode: visited [i]=0; distance [ start node] = 0. visited [start node]=1: while ( court & 4-1) unici distan = [NFINITY; for ( i = 0; i < u; i++) i f (distance [i] < min distance she ( visited[i]) mindisterre = distantij heret viode = ( ) for (i=0; i&u; i++) mindisten ble ! visited [i] mindistar - distantij for (1=0; icu; i++) i (min distan + cost [ went note ] [i] < distant [i]) distanc [i] = min distant + cost [neutrode] [i]; pred [i] - ment mode;

Caut H; of because the art we decide to be a first if (i) = start wood) printf (" u Distour of node ! d = "/d", i, distour [i]) print ("In Data = 1/d", i). do 5 in = pred [p] in have while ( j != start woll) Ente the graph. 0 9 25 9 0 68 2 6 0 0 Vector Distance for Sommer O types cash and other war before the same And the second was a second of the second of 2

Using TCP/IP sockets, write a client-sever proton de la make dient surding for file name & my server to just back for contents of the right file if present. from socket import \* ruve Nam = '127.0.0.1' surer Port = 12000 Miest Socket = socket (AF INET, SOCK\_STREAM) Miet Socket a · count ({ suter Nam, surer Port) senten = input ( \n Enche File now: 11). (liet Sorket · send ( surtine · encode()) file contents = client Socket. recv (1024). decode () priect (' lu From Seve: lu') print (file contruls) Mient Socket . Man () Output: Entre file name: sure TCP. py From Serra: cametiae Socket; addr = said Socket. accept() Jenstein = connection Socket . recr (1024). devo de () file = open ( justem, " r") 1 = file · Yead (1024) connution Socket · stud (1. sucode ())

print ('In Sent contents of 't sentenn)
file. Moss()

Commission Socket. close()

from sorkit juport \* que Vaire = "127. 0.0.1" July Port = 12000 - Markette 1: 1/2) surer Socket = socket (AF-INET, SOCK\_ STREAM) serve Socket · bind (( server Name; server Port)) : 111. server Socket. lister (1) & Marine days most print ("The surer is mady to medica") connection Socket jaddr = save Socket accept () senten = comertion Socket recr (1024). decide() file = open (untere , " r") 10 mil = file recent (1024) sold more throughout Correspon Socket sand (1. encode (2) print ( Insent contrits of 4 stutene) file close() (orrulion Gocket · Mose () Output: The saver is suady to succeive Gent contents of save TCP: py The saker is recody to ruceire.

Using UDP soluts, write a dient-sure programme the like many & LAB-13 to make mint surding the file name & hu years to send back fire contents of the enquent file if present. title are from sockt import \* sure Par = "127.0.0.1" suver Port = 12000 diet Socket = sockt ( AE INET, Sock DERAM) senten = input ("In Enter file man: "). Client Socket send to (bytes (sentenn, "Utf-P"); (sure Name) filecontents, sure Address = : client Socket : recretion (2048) print ('In Reply from Saver: In!) print (filevoutruts devode (.". Utf - 8")) Mient Socket Mose () Output: Enter file name: surendp.py. Reply from Server: ferou sould import " June Port = 12000. Server Socket = socket (AF INET, SOCK\_DGRAM) sure Saket. bind (( "127. 0.0.1", sure Port)) print ("The sura is ready to necieve") while 1: senten, Mint Adress = seres Sackt · mec Fron (2048) sentem = sentem · decode ("v+f-8") file = open ( senting, "r") 1= file. mad (2048)

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	wer Socket. sunt to (bytes (1, "vH-8"), client Addres)
	prient ('In Sent contents of ', end = '')
	print (sentene)
	file clox ()
	Serva:
	Jevou socket import +
	Sara Port = 12000
	sure Soulet = soulet (AFINET, SOCK_DGRAM)
	surer Socket. bind (("127.0.0.1", surer Port))
	print (". The saves is mady to maire")
	while 1:
	Hutun, Mient Address = sever Socket. nech feron (2018)
	surtur = surter · decode ("UH-8")
	file = open (souther, "r")
	1-14, 4 (2048)
	Ses in Cocket send to (bytes (1, "UH-8"), client Address)
	print ( '\uSent contents of ', end = !!)
	print ( sentene).
	file · Mon ().
	hu. monco.
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-	Output:
-	The save in mady
	Seit contests of sure udp.pg.