Subject: Software: Ubunta DAA LAB Hardware: Corce is Branch: CSF Semester: 4th Page No. 26 Prog No. 07 write a progream to find minimum cost spanning Tree of a given connected undirected grouph using praims Algorithm. ITHM & CODE : # include <6+dio. W> # include inits.h> # include <6tdbool.h) #define max 20 int receive ) & Cot greaph [MAX][MAX]; int V, weight; Printf ("Enter numbers of vertices (man "lod):", MAX); Scanf (" % d", (V): for (int i = 0; 1 i < V; i++) Sfort (int j=0; i <v; j+1) Sgreaph [i][i] = 0; Paintf ("In Entere edge weights (Entere O if no edge emists): \n"); forc (1mt i= 0; i < v; i++) Forc (int j= i+1; j<v; j++) Brinth ("Weight between vertion old and old; ", i, i); Scanf ("1/0 d", & weight ); IPUT GIVEN UTPUT OBTAINED REMARKS Signature of Student Rudicanarrayan Sahoo Signature of Faculty BRADE : Date: 03/04/25 Date:

Subject: Software: Obcenta DAA LAB Hardware: Corce is Branch: CSF Semester: Uth Page No. 24 Prog No. 07 RITHM & CODE : graph [i][i] = weight; greaph [i][i] = weight; int Parcent [v]; int key [V]; bool in MST [V]; For (int 1=0; kv; i++) { key[i] = INT\_ max; int MST [i] = talse; key[0]=0; Parcent [0] = -1; fore (int count = 0; count < V-1; count +t) I int min-key = INT\_MAX, U; fore (int v= 0; V <V ; V++) Fif [inmst [v] = = false of key [v] < min. key) min- key = key [v]; V=V; 7 NPUT GIVEN DUTPUT OBTAINED

REMARKS

GRADE:

Signature of Faculty

Date:

Signature of Student Audroanarcaspy School

Date:

Subject: Software: Ubuntu DAA LAB Hardware: Corce 15 Branch: CSf Semester: 4th Page No. 27 Prog No. 07 LEM STATEMENT ORITHM & CODE: inmst [U] = traue; forc (int v = 0; V < V: (V++) Fif (grouph [v][v] & & mst [v] == false & & grouph [v][v] < key [v]) Parcent [v] = U; key [v] = graph [v][v]; Praintf 1" In Minimum Spanning Trave Edges: In"); Praint P ("Edge It Weight In"); int total weight - 0; Fore (int i=1; i < v; i++) Preintf ["bd - "lod It "lod In", Parcent [i], i, greaph [i] [Parent [i]]); total-weight += graph [i] [parent [i]]; 7

INPUT GIVEN

OUTPUT OBTAINED

REMARKS

GRADE:

Signature of Faculty

ruetura 0;

Date:

Signature of Student Ruscanarrayan salvas

Date:

Printf ("In Total weight of mot: "lod In", tatal-weight);

Subject:

DAA LAB

Software: Ubunta

Hardware: Corce is

Branch: CSF

Semester: 4th

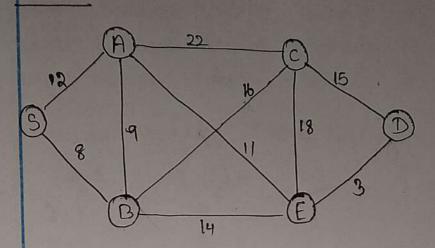
Page No. 29

Prog No. 07

BLEM STATEMENT

GORITHM & CODE :

INPUT



## OUTPUT:

Finter numbers of vertices (man 20): 6

Enter edge weights (Enter Dif no edge enists):

Weight between verteen 0 and 1: 12

weight between verteen 0 and 1:8

weight between verteen 0 and 3:0

weight between verteen p and 4:0

weight between vorteen 0 and 5:0

weight between verten 1 and 2:90

weight between verthem 1 and 3: 22

weight botween verteen land 4: 0

weight between vertton 1 and 5:11

weight lacturer verteen 2 and 3: 16

overght between Verteen 2 and 4:0

INPUT GIVEN

OUTPUT OBTAINED

REMARKS

GRADE : Signature of Faculty

Date:

Signature of Student Rudranarrayon same



Subject:

DAD LAB

Software: Ubeenta

Hardware: Corce 15

Branch:

CSE

Semester: 4th

Page No. 90 Prog No. 9

BLEM STATEMENT

ORITHM& CODE: Weight between verten 2 and 5:14

weight between verteen 3 and 4: 15

weight between Verten 3 and 5: 18

weight between verton 4 and 5: 3

Minimum Spanning Trace Edges:

Edigle Weight

0-2

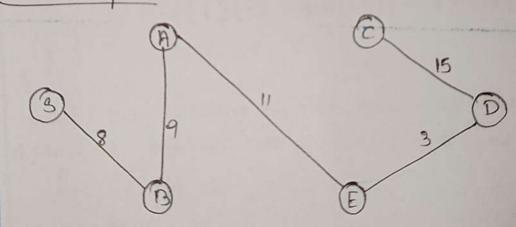
4-3

5-4

1-5

Total weight of MST:146

MST Grouph:



NPUT GIVEN

DUTPUT OBTAINED

REMARKS