```
/*
name : Durvesh D. Dhake
section: A
roll no: A-48
batch: A-2
*/

// 9. program for implementation of Prim's algorithm
#include<stdio.h>
void main()
{
int a,b,n,ne=1,i,j,min,cost[10][10],mincost=0,visted[10]={0};
printf("\n Enter The no of Vertices=");
scanf("%d",&n);
printf("\n Enter The adj Matrix\n");
for(i=1;i<=n;i++)
{
  for(j=1;j<=n;j++)
  {
  scanf("%d",&cost[i][j]);
  if(cost[i][j]==0)
  {
  cost[i][j]=999;
  }
  }
}
visted[1]=1;
while(ne<n)
{
  min=999;
  for(i=1;i<=n;i++)
  {
  for(j=1;j<=n;j++)
  {
  if(visted[i]==1)
  {
if(cost[i][j]<min)
{
  min=cost[i][j];
  a=i;
  b=j;
}
  }
  }
  }
  if(visted[a]==0||visted[b]==0)
  {
  printf("edge(%d,%d)=%d\n",a,b,min);
  mincost=mincost+min;
  {
cost[a][b]=cost[b][a]=999;
ne++;
visted[b]=1;
  }
  }
}
printf("\nMinmum spanning Tree of wt=%d",mincost);
```

```
getch();
}
/*
  ***OUTPUT***
Enter The no of Vertices=4
Enter The adj Matrix
0 7 1 6
7 0 5 2
1 5 0 3
6 2 3 0
edge(1,3)=1
edge(3,4)=3
edge(4,2)=2
Minimum spanning Tree of wt=6
  */
```