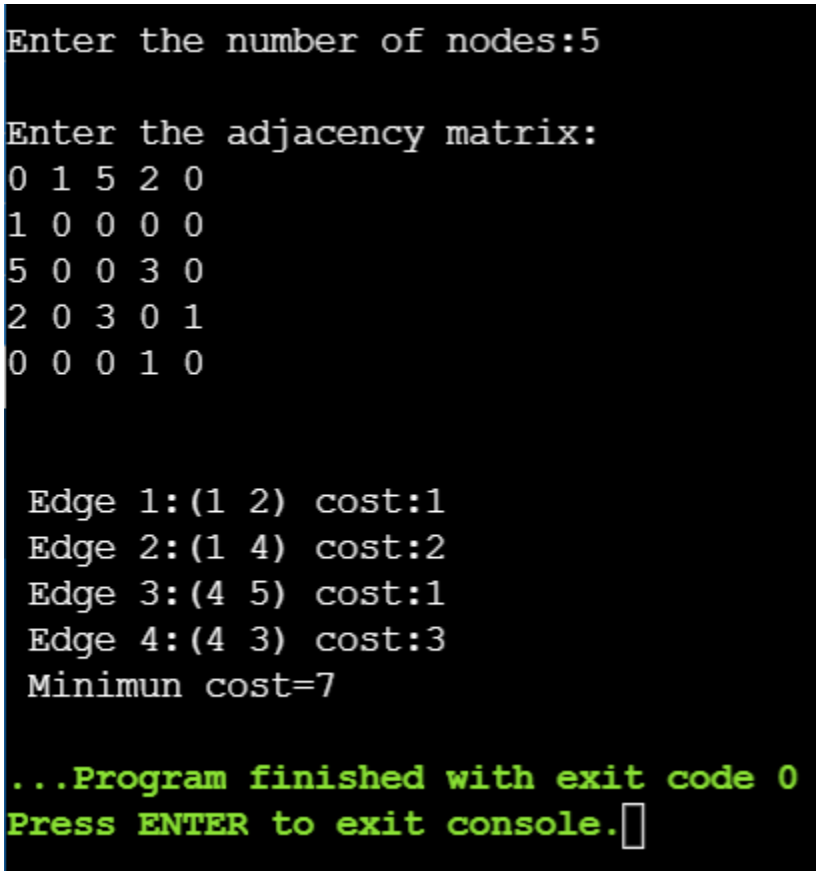
PRIMS PROGRAM :-

PROGRAM :-

```c
#include<stdio.h>
int a,b,u,v,n,i,j,ne=1;

int visited[10]={0},min,mincost=0,cost[10][10];

void main()

{

    printf("\nEnter the number of nodes:");
    scanf("%d",&n);
    printf("\nEnter the adjacency 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;
    }
    visited[1]=1;
    printf("\n");

    while(ne < n)

    {

        for(i=1,min=999;i<=n;i++)

        for(j=1;j<=n;j++)
```

```
        if(cost[i][j]< min)
        if(visited[i]!=0)
        {
            min=cost[i][j];
            a=u=i;
            b=v=j;
        }
        if(visited[u]==0 || visited[v]==0)
        {
            printf("\n Edge %d:(%d %d) cost:%d",ne++,a,b,min);
            mincost+=min;
            visited[b]=1;
        }
        cost[a][b]=cost[b][a]=999;
    }
    printf("\n Minimun cost=%d",mincost);
    getch();
}
```

OUTPUT:-


Enter the number of nodes:5
Enter the adjacency matrix:
0 1 5 2 0
1 0 0 0 0
5 0 0 3 0
2 0 3 0 1
0 0 0 1 0
Edge 1:(1 2) cost:1
Edge 2:(1 4) cost:2
Edge 3:(4 5) cost:1
Edge 4:(4 3) cost:3
Minimun cost=7
...Program finished with exit code 0
Press ENTER to exit console.