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EX NO: 13

PROGRAM NAME: GRAPH TRAVERSAL-PRIMS

CODING:

```
#include<stdio.h>
```

```
#define SIZE 7
```

```
int
```

```
G[SIZE][SIZE]={0,4,2,5,0,0,0},{4,0,1,0,2,0,0},{2,1,0,8,3,7,4},{5,0,8,0,0,0,1},{0,2,3,0,0,9,0},{0,0,7,0,9,0,6},{0,0,4,1,0,6,0}};
```

```
int visit[SIZE]={0};
```

```
int min,p;
```

```
void prims(){
```

```
    visit[0]=1;min=100;printf("%d ",0);
```

```
    for(int l=0;l<6;l++){
```

```
        for(int i=0;i<7;i++){
```

```
            if(visit[i]==1){
```

```
                for(int j=0;j<7;j++){
```

```
                    if(G[i][j]<min && G[i][j]>0 && visit[j]!=1){
```

```
                        min=G[i][j];
```

```
                        p=j;
```

```
                    }
```

```
                }
```

```
            }
```

```
        }
```

```
visit[p]=1;
printf("%d ",p);
min=100;
}
}
int main(){
    prims();
}
```

OUTPUT:

0 2 1 4 6 3 5

Process returned 0 (0x0) execution time : 1.089 s

Press any key to continue.