EXPERIMENT 7:

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SY IT 22

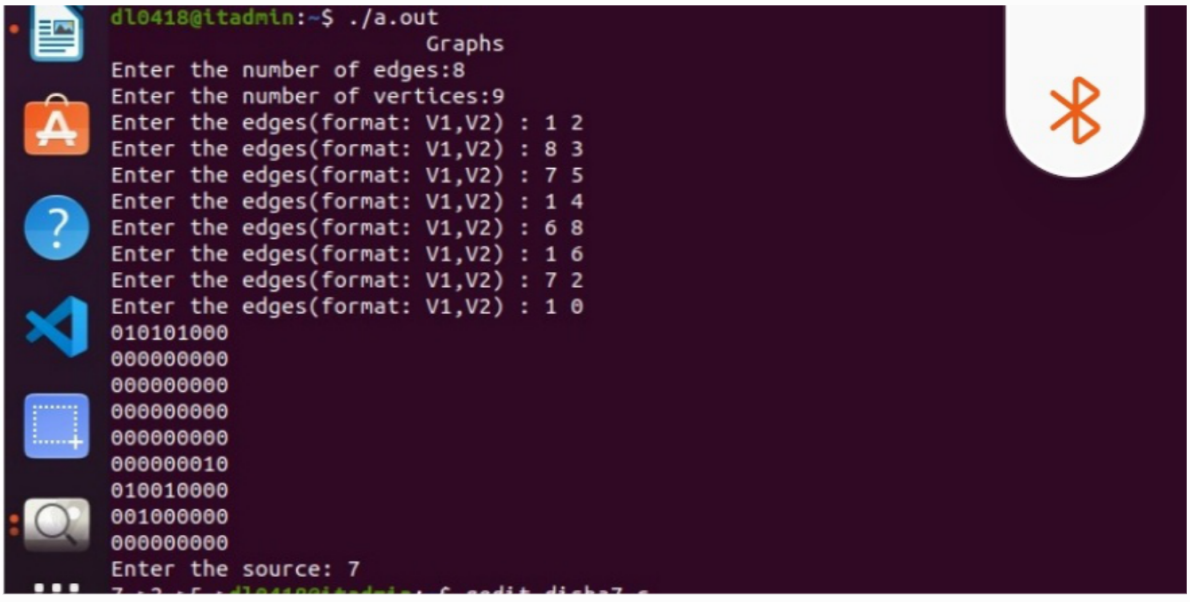
AIM:Implementation of any one Graph Traversal Technique for rea1-world application.

CODE:

```
#include<stdio.h>

#include<stdlib.h>

int source,V,E,time,visited[20],G[

void DFS(int i)

{

int j;

visited [i]=1;

printf("%d->",i+1);

for(j=0;j<V;j++)
```

```
{
if(G[i][j]==1&&visited[j]==0)
DFS(j);
}
}
int main()
{
int i,j,v1,v2;
printf("\t\t\tGraphs\n");
printf("Enter the number of edges:");
scanf("%d",&E);
printf("Enter the number of vertices:");
scanf("%d",&V);
for(i=0;i<V;i++)
{
```

```
for(j=0;j<V;j++)

G[i][j]=0;

}

for(i=0;i<E;i++)

{

printf("Enter the edges(format: V1,V2) : ");

scanf("%d%d",&v1,&v2);

G[v1-1][v2-1]=1;

}

for(i=0;i<V;i++)

{

for(j=0;j<V;j++)

printf("%d",G[i][j]);

printf("\n");

}
```


dl0418@itadmin:~$ ./a.out
Graphs
Enter the number of edges:8
Enter the number of vertices:9
Enter the edges(format: V1,V2) : 1 2
Enter the edges(format: V1,V2) : 8 3
Enter the edges(format: V1,V2) : 7 5
Enter the edges(format: V1,V2) : 1 4
Enter the edges(format: V1,V2) : 6 8
Enter the edges(format: V1,V2) : 1 6
Enter the edges(format: V1,V2) : 7 2
Enter the edges(format: V1,V2) : 1 0
010101000
000000000
000000000
000000000
000000000
000000010
010010000
001000000
000000000
Enter the source: 7