**WEEK-5**

**AIM:**Take an example subnet of hosts and obtain a broadcast tree for the subnet

**Theory**  
IP addressing is the allocation of unique ID to each and every system connected in a network to maintain communication among them through out the affixed network. There are 5 classes of IP Addresses namely A through E with the range varying from one class to the other class.  
A sub-net is a network allocation to similar systems or same hierarchical systems present in a allocated network like an organization. Each and every system can be reached through a client-server computing environment where the server acts as the Master and the clients acts as the Slaves to form a Master-Slave computing environment. 

**PROGRAM:**

#include<stdio.h>

int a[10][10],n;

void adj(int) ;

void main()

{

int i,j,root;

// clrscr();

printf("Enter no.of nodes:");

scanf("%d",&n);

printf("Enter adjacent matrix\n");

for(i=1;i<=n;i++)

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

{

printf("Enter connecting of %d-->%d::",i,j);

scanf("%d",&a[i][j]);

}

printf("Enter root node:");

scanf("%d",&root);

adj(root);

}

void adj(int k)

{

int i,j;

printf("Adjacent node of root node::\n");

printf("%d\n\n",k);

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

{

if(a[k][j]==1 || a[j][k]==1)

printf("%d\t",j);

}

printf("\n");

for(i=1;i<=n;i++)

{

if((a[k][j]==0) && (a[i][k]==0) && (i!=k))

printf("%d",i);

}

}

**OUTPUT:**

