// program to generate a broadcast tree for the given subnet

#include<stdio.h>

int a[10][10],n;

main()

{

int i,j,root;

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);

}

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\t",i);

}

printf("\n");

}