```
//NFA TO DFA
#include<string.h>
#include <stdio.h>
char
st[20][20]={"A0A","A1A","A1B","B0C","B1C"},istates[20],result[20],state[20],sym[3]="01",states[2
0][20];
int ns,nt;
int main()
{ int r=0;
printf("Enter number of states");
scanf("%d",&ns);
printf("Enter number of transitions");
scanf("%d",&nt);
printf("Enter initial states");
scanf("%s",istates);
strcpy(states[r++],istates);
printf("\t\t%c\t%c",sym[0],sym[1]);
for(int x=0;x<r;x++)
{
printf("\n");
printf("%s\t|\t",states[x]);
for(int l=0;l<strlen(sym);l++)
{
int p=0;
for(int i=0;i<strlen(states[i]);i++){
char state=states[x][i];
for(int j=0;j<nt;j++){
char state1=st[j][0],input=st[j][1],state2=st[j][2];
if(state==state1&&input==sym[l])
```

```
{
result[p++]=state2;
}}}
result[p++]='\0';
int f=0;
for(int a=0;a<r;a++){
if(strcmp(states[a],result)==0)
{
f=1;
break;
}
}
if(f==0){
strcpy(states[r++],result);
}
printf("%s\t",result);
}
}
return 0;
}
```

OUTPUT

```
Enter number of states3
Enter number of transitions5
Enter initial statesABC
0 1
ABC | A AB
A | A AB
AB | A AB
```