```c
#include<stdio.h>
#include<math.h>
#include<string.h>
#include<ctype.h>
#include<stdlib.h>
int n,m=0,p,i=0,j=0;
char a[10][10],f[10];
void follow(char c);
void first(char c);
int main()
{
int i,z;
char c,ch;
printf("Enter the no:of productions:\n");
scanf("%d",&n);
printf("Enter the productions:\n");
for(i=0;i<n;i++)
scanf("%s%c",a[i],&ch);
do
{
 m=0;
 printf("Enter the elements whose first & follow is to be
found:\n");
 scanf("%c",&c);
 first(c);
 printf("First(%c)={",c);
 for(i=0;i<m;i++)
 printf("%c",f[i]);
 printf("}\n");
 strcpy(f,"");
 m=0;
 follow(c);
 printf("follow(%c)={",c);
 for(i=0;i<m;i++)
 printf("%c",f[i]);
 printf("}\n");
 printf("contiune(0/1)?");
 scanf("%d%c",&z,&ch);
 }
 while(z==1);
 return(0);
}
void first(char c)
{
```

```c
int k;
if(!isupper(c))
f[m++]=c;
for(k=0;k<n;k++)
{
 if(a[k][0]==c)
 {
 if(a[k][2]=='$')
 follow(a[k][0]);
 else if(islower(a[k][2]))
 f[m++]=a[k][2];
 else first(a[k][2]);
 }
 }
 }
void follow(char c)
{
 if(a[0][0]==c)
 f[m++]='$';
for(i=0;i<n;i++)
 {
 for(j=2;j<strlen(a[i]);j++)
 {
 if(a[i][j]==c)
 {
 if(a[i][j+1]!='\0')
 first(a[i][j+1]);
 if(a[i][j+1]=='\0' && c!=a[i][0])
 follow(a[i][0]);
 }
 }
 }
 }
```