```c
#include<stdio.h>

#include<ctype.h>

void FIRST(char );

int count,n=0;

char prodn[10][10],first[10];

int main()

{

int i,choice;

char c,ch;

printf("How many productions:");

scanf("%d",&count);

printf("Enter %d productions epsilon= $ :\n\n",count);

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

scanf("%s%c",prodn[i],&ch);

do

{

n=0;

printf("Element :");

scanf("%c",&c);

FIRST(c);

printf("\n FIRST(%c)= { ",c);

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

printf("%c ",first[i]);

printf("}\n");

printf("press 1 to continue : ");

scanf("%d%c",&choice,&ch);

}

while(choice==1);

}
```

```c
void FIRST(char c)
{
int j;
if(!(isupper(c)))
first[n++]=c;
for(j=0;j<count;j++)
{
if(prodn[j][0]==c)
{
if(prodn[j][2]=='$')
first[n++]='$';
else if(islower(prodn[j][2]))
first[n++]=prodn[j][2];
else
FIRST(prodn[j][2]);
}
}
}
```

```
C:\Users\Nalini\FIRST.exe                                              —    □    X

How many productions:4
Enter 4 productions epsilon= $ :

$$$$
$$$
$$
$
Element :4

 FIRST(4)= { 4 }
press 1 to continue : 1
Element :$

 FIRST($)= { $ $ $    }
press 1 to continue : 1
Element :$$

 FIRST($)= { $ $ $    }
press 1 to continue : Element :
 FIRST($)= { $ $ $    }
press 1 to continue : 1
Element :$

 FIRST($)= { $ $ $    }
press 1 to continue :
```