**FOLLOW**

#include<stdio.h>

#include<string.h>

int n,m=0,p,i=0,j=0;

char a[10][10],followResult[10];

void follow(char c);

void first(char c);

void addToResult(char);

int main()

{

int i;

int choice;

char c,ch;

printf("Enter the no.of productions: ");

scanf("%d", &n);

printf(" Enter %d productions\nProduction with multiple terms should be give as separate

productions \n", n);

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

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

// gets(a[i]);

do

{

m=0;

printf("Find FOLLOW of -->");

scanf(" %c",&c);

follow(c);

printf("FOLLOW(%c) = { ",c);

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

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

printf(" }\n");

printf("Do you want to continue(Press 1 to continue....)?");

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

}

while(choice==1);

}

void follow(char c)

{

if(a[0][0]==c)addToResult('$');

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]);

}

}

}

}

void first(char c)

{

int k;

if(!(isupper(c)))

//f[m++]=c;

addToResult(c);

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

{

if(a[k][0]==c)

{

if(a[k][2]=='$') follow(a[i][0]);

else if(islower(a[k][2]))

//f[m++]=a[k][2];

addToResult(a[k][2]);

else first(a[k][2]);

}

}

}

void addToResult(char c)

{

int i;

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

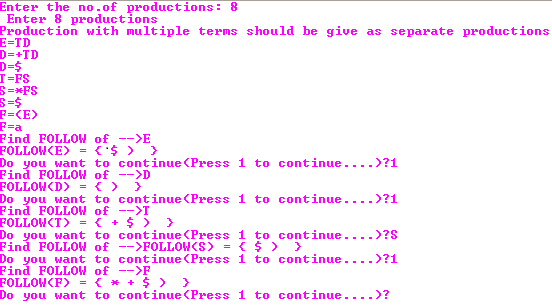
if(followResult[i]==c)

return;

followResult[m++]=c;

}

**OUTPUT:**

****