#include<iostream.h>

#include<conio.h>

void main()

{

clrscr();

char s,l[20],r[10],lead[10],trail[10];

int n,j,m;

for(int i=0;i<10;i++)

{

lead[i]=NULL;

trail[i]=NULL;

}

cout<<"\nenter total no. of productions";

cin>>n;

int k=0;

m=0;

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

{

cout<<"\nenter the LHS of production";

cin>>l[i];

cout<<"\nenter the RHS of production";

cin>>r;

for(int j=0;j<2;j++)

{

if((r[j]=='(') || r[j]==')' || r[j]=='\*' || r[j]=='+' || r[j]=='-' || r[j]=='/' )

{

lead[k]=r[j];

k=k+1;

}

if((r[j]=='i') && (r[j+1]=='d'))

{

lead[k]=r[j];

lead[k+1]=r[j+1];

k=k+1;

}

}

for(j=1;j<=2;j++)

{

if((r[j]=='(') || r[j]==')' || r[j]=='\*' || r[j]=='+' || r[j]=='-' || r[j]=='/' )

{

trail[m]=r[j];

m=m+1;

}

if((r[j-1]=='i') && (r[j]=='d'))

{

trail[m]=r[j-1];

trail[m+1]=r[j];

m=m+1;

}

}

}

cout<<"\nthe Leading(A) is :\n";

cout<<"{  ";

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

{

if((lead[i]=='i') && (lead[i+1]=='d'))

cout<<lead[i]<<lead[i+1]<<"  ";

else

cout<<lead[i]<<"  ";

}

cout<<"}";

cout<<"\nthe Trailing(A) is :\n";

cout<<"{  ";

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

{

if((trail[i]=='i') && (trail[i+1]=='d'))

cout<<trail[i]<<trail[i+1]<<"  ";

else

cout<<trail[i]<<"  ";

}

cout<<"}";

getch();

}