6. TO REMOVE LEFT RECURSION

CODE:

#include<stdio.h>

#include<string.h>

int main() {

char input[100],l[50],r[50],temp[10],tempprod[20],productions[25][50];

int i=0,j=0,flag=0,consumed=0;

printf("Enter the productions: ");

scanf("%1s->%s",l,r);

printf("%s",r);

while(sscanf(r+consumed,"%[^|]s",temp) == 1 && consumed <= strlen(r)) {

if(temp[0] == l[0]) {

flag = 1;

sprintf(productions[i++],"%s->%s%s'\0",l,temp+1,l);

}

else

sprintf(productions[i++],"%s'->%s%s'\0",l,temp,l);

consumed += strlen(temp)+1;

}

if(flag == 1) {

sprintf(productions[i++],"%s->e\0",l);

printf("The productions after eliminating Left Recursion are:\n");

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

printf("%s\n",productions[j]);

}

else

printf("The Given Grammar has no Left Recursion");

}

OUTPUT:

Enter the productions: K->KAc|BC|abcd

KAc|BC|abcdThe productions after eliminating Left Recursion are:

K->AcK'

K'->BCK'

K'->abcdK'

K->e

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Process exited after 39.47 seconds with return value 0

Press any key to continue . . .

