7. Implement a C program to eliminate left factoring.

#include<stdio.h>

#include<string.h>

   int main()

   {

       char gram[20],part1[20],part2[20],modifiedGram[20],newGram[20],tempGram[20];

       int i,j=0,k=0,l=0,pos;

       printf("Enter Production : S->");

       gets(gram);

       for(i=0;gram[i]!='|';i++,j++)

            part1[j]=gram[i];

       part1[j]='\0';

       for(j=++i,i=0;gram[j]!='\0';j++,i++)

            part2[i]=gram[j];

       part2[i]='\0';

       for(i=0;i<strlen(part1)||i<strlen(part2);i++)

       {

            if(part1[i]==part2[i])

            {

                 modifiedGram[k]=part1[i];

                 k++;

                 pos=i+1;

            }

       }

       for(i=pos,j=0;part1[i]!='\0';i++,j++){

            newGram[j]=part1[i];

       }

       newGram[j++]='|';

       for(i=pos;part2[i]!='\0';i++,j++){

            newGram[j]=part2[i];

       }

       modifiedGram[k]='X';

       modifiedGram[++k]='\0';

       newGram[j]='\0';

       printf("\n S->%s",modifiedGram);

       printf("\n X->%s\n",newGram);

  }

