#include <stdio.h>

#include <string.h>

void eliminateLeftRecursion(char production[]);

int main() {

char production[100];

printf("Enter a production: ");

fgets(production, sizeof(production), stdin);

production[strcspn(production, "\n")] = '\0';

eliminateLeftRecursion(production);

return 0;

}

void eliminateLeftRecursion(char production[]) {

int i, j, n = 0;

char f, b[100], c[100];

f = production[0];

if (production[0] == production[3]) {

for (i = 4; production[i] != '\0'; i++) {

for (j = 0; production[i] != '/' && production[i] != '\0'; i++) {

b[j] = production[i];

j++;

}

b[j] = '\0';

if (production[i] == '/')

i++;

for (j = 0; production[i] != '\0'; j++) {

c[j] = production[i];

i++;

n++;

}

}

printf("%c->%c'%c'\n", f, f, c[0]);

printf("%c'->", f);

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

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

}

printf("%c'/ $\n", f);

} else {

printf("Not a left recursion\n");

}

}

OUTPUT

A black screen with white text

Description automatically generated