

**Aim: Code to apply Left factoring**

**Input 1:**

A->aAB|aBc|aAc

**Output1:**

```
D:\Semester7\CD_Lab\CD_Lab4_17CS01003>a.exe
Enter number of productions:1
Certain conditions for entering:
1.Nonterminals are single Capital alphabet and terminals are single lowercase alphabet
2.No space in defining production

Enter each production on a new line without space(E->E+T|T):
A->aAB|aBc|aAc

Updated Productions:
A->aZ
Z->AY|Bc
Y->B|c
```

**Input 2:**

A->abcA|abcB|abD|e

**Output2:**

```
D:\Semester7\CD_Lab\CD_Lab4_17CS01003>a.exe
Enter number of productions:1
Certain conditions for entering:
1.Nonterminals are single Capital alphabet and terminals are single lowercase alphabet
2.No space in defining production

Enter each production on a new line without space(E->E+T|T):
A->abcA|abcB|abD|e

Updated Productions:
A->abZ|e
Z->cY|D
Y->A|B
```

### Input3:

A->abcD|abcB|abc

### Output3:

```
D:\Semester7\CD_Lab\CD_Lab4_17CS01003>a.exe
Enter number of productions:1
Certain conditions for entering:
1.Nonterminals are single Capital alphabet and terminals are single lowercase alphabet
2.No space in defining production

Enter each production on a new line without space(E->E+T|T):
A->abcD|abcB|abc

Updated Productions:
A->abcZ
Z->D|B|e
```