SAMPLE INPUTS AND OUTPUT:

1) E->E+T

E->T

T->T*F

T->F

F->(E)

F->@

Output:

```
Enter the number of productions:
6
Enter the number of non terminals:
3
Enter the non terminals one by one:
E
T
F
Enter the number of terminals:
5
Enter the terminals (single lettered) one by one:
+
*
(
)
@
Enter the productions one by one in form (S->ABc):
E->E+T
E->T
T->T*F
T->F
F->(E)
F->@

I0:
S->.E
E->.E+T
E->.T
T->.T*F
T->.F
F->.(E)
F->.@

I0 on reading the symbol E goes to I1:
S->E.
E->E.+T

I0 on reading the symbol T goes to I2:
E->T.
T->T.*F
```

```
I0 on reading the symbol F goes to I3:
T->F.

I0 on reading the symbol ( goes to I4:
F->(.E)
E->.E+T
E->.T
T->.T*F
T->.F
F->.(E)
F->.@

I0 on reading the symbol @ goes to I5:
F->@.

I1 on reading the symbol + goes to I6:
E->E+.T
T->.T*F
T->.F
F->.(E)
F->.@

I2 on reading the symbol * goes to I7:
T->T*.F
F->.(E)
F->.@

I4 on reading the symbol E goes to I8:
F->(E.)
E->E.+T

I4 on reading the symbol T goes to I2.
I4 on reading the symbol F goes to I3.
I4 on reading the symbol ( goes to I4.
I4 on reading the symbol @ goes to I5.
I6 on reading the symbol T goes to I9:
E->E+T.
T->T.*F

I6 on reading the symbol F goes to I3.
I6 on reading the symbol ( goes to I4.
I6 on reading the symbol @ goes to I5.
I7 on reading the symbol F goes to I10:
T->T*F.

I7 on reading the symbol ( goes to I4.
I7 on reading the symbol @ goes to I5.
I8 on reading the symbol ) goes to I11:
F->(E).

I8 on reading the symbol + goes to I6.
I9 on reading the symbol * goes to I7.
```

```
*********Shift Actions**********

        +       *       (       )       @       $       E       T       F
I0                      S4              S5              1       2       3
I1      S6                                      ACC
I2              S7
I3
I4                      S4              S5              8       2       3
I5
I6                      S4              S5                      9       3
I7                      S4              S5                              10
I8      S6                      S11
I9              S7
I10
I11


**********Reduce actions**********

        +       *       (       )       @       $
I9      R1                      R1              R1
I2      R2                      R2              R2
I10     R3      R3              R3              R3
I3      R4      R4              R4              R4
I11     R5      R5              R5              R5
I5      R6      R6              R6              R6
```

2) S->CC
C->cC
C->d

Output:

```
Enter the number of productions:
3
Enter the number of non terminals:
2
Enter the non terminals one by one:
S
C
Enter the number of terminals:
2
Enter the terminals (single lettered) one by one:
c
d
Enter the productions one by one in form (S->ABc):
S->CC
C->cC
C->d

I0:
Z->.S
S->.CC
C->.cC
C->.d
```

```
I0 on reading the symbol S goes to I1:
Z->S.

I0 on reading the symbol C goes to I2:
S->C.C
C->.cC
C->.d

I0 on reading the symbol c goes to I3:
C->c.C
C->.cC
C->.d

I0 on reading the symbol d goes to I4:
C->d.

I2 on reading the symbol C goes to I5:
S->CC.

I2 on reading the symbol c goes to I3.
I2 on reading the symbol d goes to I4.
I3 on reading the symbol C goes to I6:
C->cC.

I3 on reading the symbol c goes to I3.
I3 on reading the symbol d goes to I4.

*********Shift Actions**********

        c       d       $       S       C
I0      S3      S4              1       2
I1                      ACC
I2      S3      S4                      5
I3      S3      S4                      6
I4
I5
I6


***********Reduce actions***********

        c       d       $
I5                      R1
I6      R2      R2      R2
I4      R3      R3      R3
```

3) S->iSeS
S->iS
S->a

Output:

```
Enter the number of productions:
3
Enter the number of non terminals:
1
Enter the non terminals one by one:
S
Enter the number of terminals:
3
Enter the terminals (single lettered) one by one:
i
e
a
Enter the productions one by one in form (S->ABc):
S->iSeS
S->iS
S->a

I0:
Z->.S
S->.iSeS
S->.iS
S->.a

I0 on reading the symbol S goes to I1:
Z->S.

I0 on reading the symbol i goes to I2:
S->i.SeS
S->i.S
S->.iSeS
S->.iS
S->.a

I0 on reading the symbol a goes to I3:
S->a.

I2 on reading the symbol S goes to I4:
S->iS.eS
S->iS.

I2 on reading the symbol i goes to I2.
I2 on reading the symbol a goes to I3.
I4 on reading the symbol e goes to I5:
S->iSe.S
S->.iSeS
S->.iS
S->.a
```

```
I5 on reading the symbol S goes to I6:
S->iSeS.

I5 on reading the symbol i goes to I2.
I5 on reading the symbol a goes to I3.

*********Shift Actions*********

        i       e       a       $       S
I0      S2              S3              1
I1                              ACC
I2      S2              S3              4
I3
I4              S5
I5      S2              S3              6
I6


**********Reduce actions**********

        i       e       a       $
I6              R1              R1
I4              R2              R2
I3              R3              R3

Process returned 0 (0x0)   execution time : 38.322 s
Press any key to continue.
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