Practical - 6

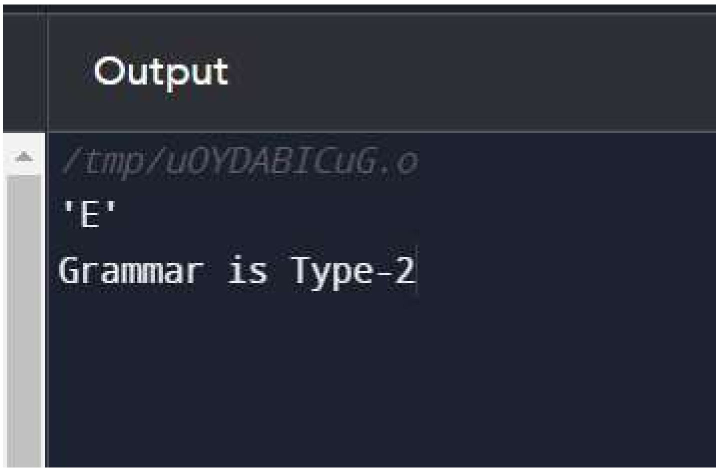
AIM: Write a program to check whether given grammar is type-2 or not?

E-> E + T | T
T -> T * F | F
F -> F |(id)

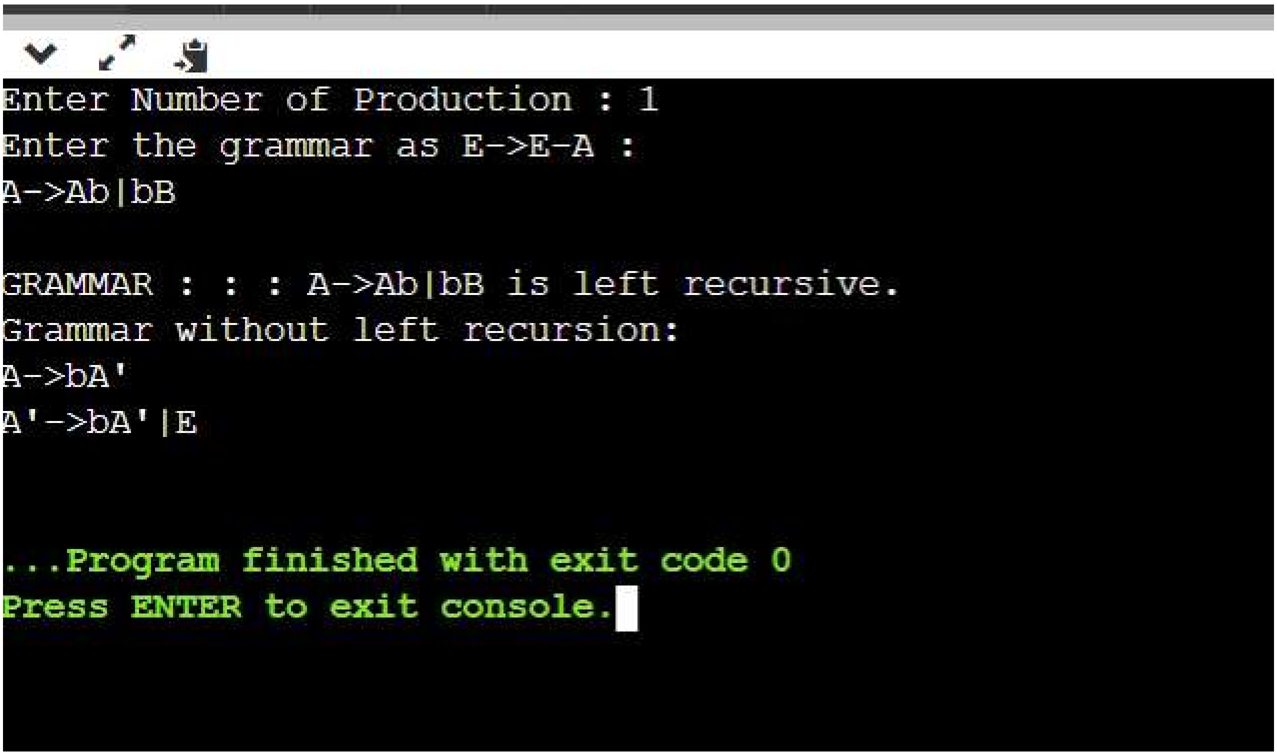
Example program:

```
#include <stdio.h>
#include <string.h>

int main()
{
char str[] = "E-> E + T | T";
int init_size = strlen(str);
char delim[] = "->";
char *ptr = strtok(str, delim);
    char test[1];
while (ptr != NULL)
{
   test[0] = *ptr;
printf("'%s'\n", ptr);
//ptr = strtok(NULL, delim);
if ((test[0] >= 'A' && test[0] <= 'Z'))
{
   printf("Grammar is Type-2");
   break;
}
else
{
    printf("Grammar is not Type-2");
    break;
}
}

return 0;
}
```

Output:



```
/tmp/uOYDABICuG.o
'E'
Grammar is Type-2
```



```
Enter Number of Production : 1
Enter the grammar as E->E-A :
A->Ab|bB

GRAMMAR : : : A->Ab|bB is left recursive.
Grammar without left recursion:
A->bA'
A'->bA'|E


...Program finished with exit code 0
Press ENTER to exit console.
```