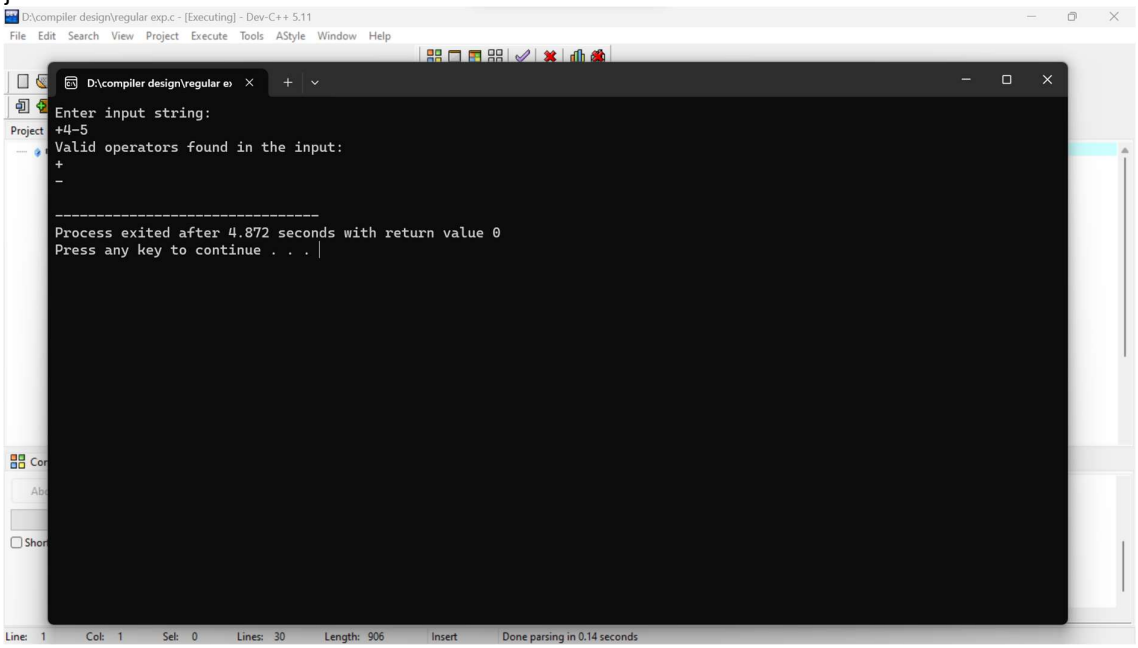
3. Design a lexical Analyzer to validate operators to recognize the operators +,-,*,/ using regular Arithmetic operators .

```
#include <stdio.h>

int main() {

   har input[1000];

   int i = 0;

   int operatorFound = 0; // Flag to track if any operator is found

   printf("Enter input string:\n");

   fgets(input, sizeof(input), stdin); // Read input from user

   printf("Valid operators found in the input:\n");

   // Loop through each character in the input

   while (input[i] != '\0') {

      // Check if the character is one of the specified arithmetic operators

      if (input[i] == '+' || input[i] == '-' || input[i] == '*' || input[i] == '/') {

         printf("%c\n", input[i]); // Print the valid operator

         operatorFound = 1; // Set the flag to indicate an operator is found

      }

      i++;

   }

   // Check if no operator is found

   if (!operatorFound) {

      printf("Error: No arithmetic operators found in the input\n");

   }


   return 0;
```

```
}
```


D:\compiler design\regular exp.c - [Executing] - Dev-C++ 5.11
File Edit Search View Project Execute Tools AStyle Window Help
D:\compiler design\regular e
Enter input string:
+4-5
Valid operators found in the input:
+
-

Process exited after 4.872 seconds with return value 0
Press any key to continue . . .
Line: 1 Col: 1 Sel: 0 Lines: 30 Length: 906 Insert Done parsing in 0.14 seconds