

### Experiment -3

**Develop a lexical Analyzer to validate operators to recognize the operators +,-,\*,/ using regular Arithmetic operators using C program.**

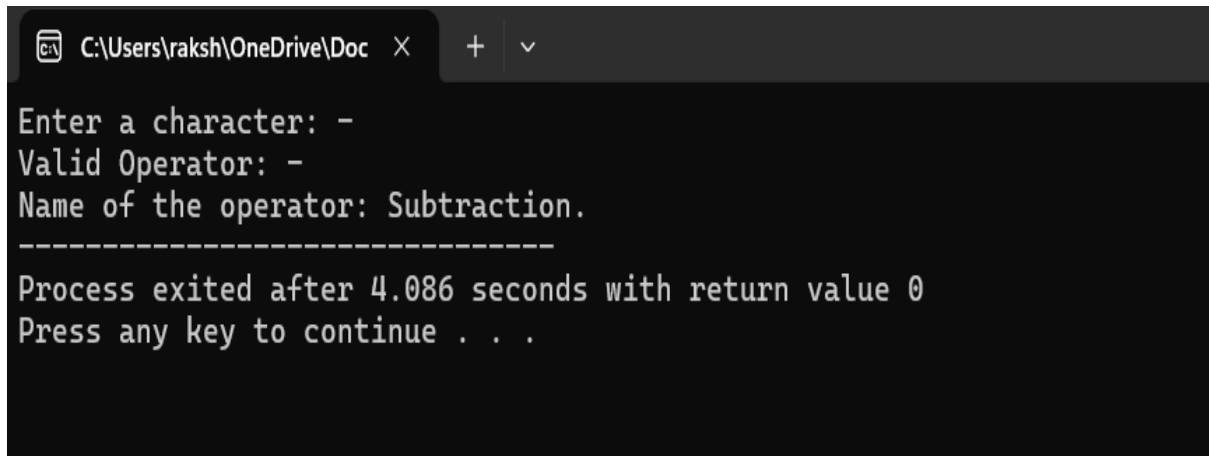
Program:

```
#include <stdio.h>

int main() {
    char ch;
    printf("Enter a character: ");
    scanf(" %c", &ch);
    switch (ch) {
        case '+':
            printf("Valid Operator: +\n");
            printf("Name of the operator: Addition.");
            break;
        case '-':
            printf("Valid Operator: -\n");
            printf("Name of the operator: Subtraction.");
            break;
        case '*':
            printf("Valid Operator: *\n");
            printf("Name of the operator: Multiplication.");
            break;
        case '/':
            printf("Valid Operator: /\n");
            printf("Name of the operator: Division.");
            break;
        default:
            printf("Invalid Operator\n");
    }
}
```

```
    return 0;  
}
```

### Output:



The screenshot shows a Windows command prompt window with a dark background. The title bar at the top indicates the file path 'C:\Users\raksh\OneDrive\Doc' and includes standard window controls. The command prompt displays the following text: 'Enter a character: -', 'Valid Operator: -', 'Name of the operator: Subtraction.', a separator line of dashes, 'Process exited after 4.086 seconds with return value 0', and 'Press any key to continue . . .'. The text is rendered in a white, monospaced font.

```
C:\Users\raksh\OneDrive\Doc > Enter a character: -  
Valid Operator: -  
Name of the operator: Subtraction.  
-----  
Process exited after 4.086 seconds with return value 0  
Press any key to continue . . .
```