DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

NITK SURATHKAL

SEM – V

CS 305 – COMPILER DESIGN LAB

Week – 1 Exercises

Date: 05. 08. 2020

Time: 2pm to 4 pm   **Max Marks: 20**

Given input file(input.c):

```
/*Sum of Natural Numbers
using for loop*/

#include <stdio.h>
int main () {
    int n, i, sum = 0;

    printf("Enter a positive integer: ");
    scanf("%d", &n);
        //loop starts here
    for (i = 1; i <= n; ++i) {
        sum += i;
    }

    printf("Sum = %d", sum);
    return 0;
}
```

1. Implement a Lex program to copy the content of input file (input.c) to another file (input_copied.c) and remove single-line comments, multi-line comments and whitespaces in input_copied.c file.

2. Implement a Lex program to print the count and line number of identifiers, keywords and operators in input_copied.c file.

Upload your code with its output in .zip or .rar.