# Assignment 2 On Lexical Analysis

CSE-0302 Summer 2021

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Abstract—To write a program that reads any simple program as source and separates out the valid tokens from the source program.

# I. INTRODUCTION

As it is known that Lexical Analysis is the first phase of compiler also known as scanner. It converts the input program into a sequence of Tokens.

### II. AIMS

A C program consists of various tokens and a token is either a keyword, identifiers, operators, separators, parenthesis, numbers, symbol etc..

- 1) Keywords: Examples- for, while, if etc.
- 2) Identifier Examples- Variable name, function name etc.
- 3) Operators: Examples- '+', '++', '-' etc.
- 4) Separators: Examples-', ';' etc

# III. OUTPUT

'int' Is a keyword

- 'a' Is a valid identifier
- '=' Is an operator
- 'b' Is a valid identifier
- '+' Is an operator
- '2c Is not a valid identifier

# IV. CONCLUSION

C program to detect tokens in a C program.

## V. CODE

Below is a C program to print all the keywords, literals, valid identifiers, invalid identifiers, integer number, real number in a given C program:

Fig. 1.

```
| Implest | Semblest | Implest | Implest
```

Fig. 2.

Fig. 3.