

Note: corrections are in red.

[1] Do we have `const` as a keyword ? Do we have an exhaustive list of supported keywords ?

No `const` is not a keyword here. You can treat it just like any other variable.

Exhaustive list of keywords: {break, case, char, continue, default, do, double, else, extern, float, for, if, int, long, return, short, sizeof, struct, switch, void, while}.

[2] Are things like long long int supported?

Yes.

[3] In C expressions like  $a+-b$  and  $a-+b$  are valid but  $a++b$  and  $a--b$  are not valid. Do we have to handle those?

$a+-b$ ,  $a-+b$ : valid.

a++b, a- -b: invalid.

[4] short float, long double?

Yes. Any combination thereof.

[5] should we give error if there are 2 defaults inside a switch statement?

No.

[6] Adding to Pragyan's question, what about  $a+++b$ ?

```
int main()
{
    a+++b; //valid. also a++-b
    main(a+++b); //valid. also main(a++-b);

    main(a+++b;); //invalid
}
```

[7] `int n = "none"` ? is it supposed to be valid

Yes.

[8] Why would it only require ; after ++

[9] `int c = a+++b;` This actually runs in C

Yes. This statement is also valid here.

[10] what about “System.out.print();”

Valid. This “.” operator of structure will handle this. The parser thinks `System`, `out`, and `print` are identifiers. Here are more valid examples.

```
int main()
{
    itm.chennai.cs3300(); //valid
    a.a.a.a.a.a.a.a.main()=9; //valid
    itm.chennai.a=h.g(g(g())); //valid
}
```

[11] Random strings?

You do not need worry about these. Parser will anyway throw syntax error as it is grammatically incorrect.

```

,,,<>()
{
    S#!\~();
    nit **ff%;
}

```

\*\*\*parsing terminated\*\*\* [syntax error]

#### [12] distinguish unary + binary +

To be handled in YACC specification. In LEX, include the following:

```
"+" {return '+'; //this is for both unary and binary.}
```

Here is an example.

```
int main()
{
    {
        a=-b;
        aa=b+a;
        main();
    }
}

***parsing successful***
#global_declarations = 1
#function_definitions = 1
#integer_constants = 0
#pointers_declarations = 0
#ifs_without_else = 0
if-else max-depth = 0
```

#### [13] Do we need to take care of the context in break, continue, return?

No. Here is an example.

```
int main()
{
    int a;
    {
        break;
        continue;
        return;
    }
}

***parsing successful***
#global_declarations = 1
#function_definitions = 1
#integer_constants = 0
#pointers_declarations = 0
#ifs_without_else = 0
if-else max-depth = 0
```

#### [14] What are multiple strings in same line?

Here is a valid example.

```
int main()
{
    char *test_str = "Hello World" " part 1" "part 2"; //valid
}

***parsing successful***
#global_declarations = 1
#function_definitions = 1
#integer_constants = 0
#pointers_declarations = 1
#ifs_without_else = 0
if-else max-depth = 0
```