

LAB SHEET 6

Given below are some exercises that enhance simple declaration statement to recognize a wide variety of other declarations.

1. **Multiline declaration:** Extend the syntax rules to accept declaration statements with newline in between

Example: int a;
 float b;

2. **Floating point:** Extend the lexical and syntax rules to recognize assignment of floating point numbers (2.345) in declaration statement.

float time = 12.34;

3. **Constant Declaration:** Extend the syntax rules to recognize declaration of constants of the form:
const float pi = 3.14; .

Note, constant declaration can be done one at a time and definition during declaration is compulsory.

i.e. const string xyz; is invalid whereas const string xyz = "hello"; is valid.

4. Extend your rules to recognize **array declarations** of the form:

int value[10]; string colors[5];

5. Extend your rules to recognize **array initializations** of the form:

int value[10] = {1, 25, 43, };