Stick to A-Z, a-z, 0-9 & _

Advice   You can declare multiple variables on same line, but don't.

3.4.2   `int i, j;` // don't do this, harder to read.

Compiler error if you attempt to use an uninitialized variable.

Declarations   `int x;` ⟵ uninitialized

initialization   `x = 42;` ⟵ initialized

`int y = 100;` ⟵ declaration & initialization combined.

Declarations can be put anywhere, but best practice is to put them as closely as possible to first use.

var   var ⟶ when compiler can deduce type

`int z = 99;`

`var z = 99;`

declarations = definitions   In Java declarations are not separate from definitions.

3.4.3

Constants   <u>final</u> to declare constants   <u>const</u> is not used, but is a reserved word.

⟵ can assign once.

use uppercase name (convention)

`final int WIDTH = 10;`

usually declared at class level : Class constants ⟹ static final (called)

Enums   3.4.4

enum types, for restricted sets of values (named values)

`enum Size { SMALL, MEDIUM, LARGE }`

`Size s = Size.SMALL;`

NULL enum vars   variables for enums can hold null.

Projects :   - see what the compiler error looks like if you try to use an uninitialized variable.

    - using it in scope

    - passing to a function

    - returning it from a function.

   - try casting an enum variable to int. Does it work? If so, do you need an explicit cast?