

Summary I

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C++ Programming I

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1 Basics

1.1 Variables

Listing 1: Declaration, Initialisation and Definition

```
1 //Declaration
2 int x; //of variable int
3 int getValue(); //of function prototype
4 //Definition
5 int x; //same as declaration
6 int getValue(){ /*Definition*/ }// without ';'
7 //Initialisation is optional, but it's
8 //often a good programming practice
9 int x=42;//refers to the "assignment" of a value
10 //initialization does not mean much for functions
11 }
```

- The variable type attribute tells the compiler the nature of data the variable can store, and the compiler reserves the necessary space for it
- The variable name is a friendly replacement for the address in the memory
- Use camelCase naming convention for variables
- Naming conventions differs for objects, functions etc.

Naming variables appropriately is important for writing good, understandable, and maintainable code!

2 Functions

3 Pointers and References

4 Fundamentals of Object Oriented C++ Programming

5 Classes and Objects