C++ Basics

• A C++ source-code program is a collection of files containing class definitions and function definitions, with exactly one of the functions named int main(), where the control flow begins.

• A useful program will almost always also contain
  — preprocessor directives. E.g., #include <iostream>
  — using declarations. E.g., using std::cout;
  — globally defined constants and namespaces.
  — Comments /* Like this */ // or this .

• Many programs also contain global variables. These are accessible to all functions and classes in the program. Their use should generally be avoided as much as possible.
• A *class* or *struct* is a programmer-defined type. E.g.,

```c
struct Date{ int month, day, year; }
```

defines a Date type to hold three integer *members*: month, day and year.

• A *variable* is an *object* with an *identifier*. E.g., `Date today;`
creates a variable of type `Date` named `today`.

• A legal C++ identifier is any sequence of letters, digits, and
underscores (\_) that begins with either a letter or an under-
score and is not one of the C++ keywords.

• The programmer creates and assigns identifiers to his/her
variables, functions, and classes.