# **3.5 (Function Prototypes and Definitions) Explain the differences between a function prototypes and functions definitions.**

A function prototype is a declaration of a function that tells the compiler the function name, return type and types of its parameters. However a function definition actually is implementation of function, it has local variables and statements that describes what the function does.

# **3.6 (Default constructor) What’s a default constructor? How are an object’s data members initialized if class has only an implicitly defined default constructor?**

Default constructor is a special member function that doesn’t return type (not even void)

and it must be defined with same name as the class, so that the compiler can distinguish it from other member functions. Default constructor of class implicitly calls default constructor of each class data member.

# **3.7 (Data members) Explain the purpose of data members**

Member functions of class’s objects manipulate its attributes that are represented as variables and called data members. Data members provide us opportunity of flexible creation objects of the class. Data members are declared inside a class and outside the bodies of the class’s member functions definitions. Most data member declarations’ access specifiers are private. That is why client code functions cannot access to data members directly. Only member functions and “friends” of class have access to data members. If we specify access public of all member functions and data members in class definition at that time we have changed class’s true purpose. Because the behaviours’ object of class will be as regular built-in function and variables in int main function.

# **3.8 (Header and Source-Code Files) What’s a header? What is a source-code file? Discuss the purpose of each.**

By convention headers provide us reusable components as a classes in sperate file with .h extension when building object-oriented C++ program. Source-code file is main file which main function in it. This file is executable file.