

CS 3723: Programming Languages

Apr 13, 2012

You Name:

1. For each of the following, indicate whether it belongs to the interface or the implementation of a function abstraction.
 - (a) types of function parameters
 - (b) type of return value
 - (c) function body
 - (d) comment that explains how to use the function
2. For each of the following, indicate whether it belongs to the interface or the implementation of a data abstraction.
 - (a) internal structure of the data
 - (b) functions that can operate on the data
3. For each of the following, indicate whether it belongs to the interface or the implementation of a module.
 - (a) a group of related types, variables and function interfaces publicized in a header file or declared as public.
 - (b) internal structure of data types and implementation details of public functions
4. Give an example code in ML to illustrate a pure data abstraction. Indicate the interface and implementation of the abstraction.

5. Give an example code in C++ or Java to illustrate a module. Is your module also a data abstraction?