CS 3723: Programming Languages
Apr 11, 2012

You Name:

1. Which of the following statement about exceptions is incorrect?
   (a) Exception is a language support for programs to jump out of the current block when something unusual/unexpected happens.
   (b) When throwing an exception, the program jumps out one or more levels of blocks until reaching a block that handles the exception.
   (c) Information can be passed to the exception handler during the process.
   (d) Exception handling can be used to make sure resources are properly managed (e.g., opened files are closed) when errors occur.
   (e) Static scoping is used when looking for exception handlers.
   (f) Dynamic scoping is used when looking for exception handlers.
2. To support exceptions, a language must include which of the following components.
   (a) Declaration of different types of exceptions
   (b) A special operator which can be invoked to raise an exception
   (c) Declaration of handlers for different types of exceptions
   (d) Relations between different types of exceptions
3. Which of the following statements are correct in relating exceptions with the type system of a language.
   (a) The type of exceptions must be a part of the type system.
   (b) The type of values associated with an exception must match the return type of the function throwing the exception.
   (c) The type of values returned by the exception handler must match the return type of the function handling the exception.
4. Give an example code in ML, C++, or Java to illustrate a pure function abstraction, a pure data abstraction, and a module.