

# Error Codes and Exceptions Solutions

- In large programs, error conditions are often processed in a different part of the code from where they occurred.  
Briefly explain why this is done
  - To avoid mixing different functionality in the same code
- What is meant by an error code in C++?
  - An error code is a number that is returned from a function when an error condition occurs
  - The value of the number is a code that represents the error

- Give some of the disadvantages of error codes
  - Extra code required to generate and process the error code
  - The correct error code must be returned from every return path
  - Need to synchronize error codes between different parts of the code creates maintenance problems
  - May conflict with third-party code that uses a different convention for error code values

- Briefly explain what is meant by an exception in C++
  - An exception is an error condition outside the normal program flow
- Briefly explain why exceptions are preferable to error codes
  - The code is automatically generated by the compiler
  - Exceptions cannot be ignored
  - Constructors can throw exceptions