The edit-compile-test cycle is the process by which programmers iteratively remove errors from their programs.

EDIT: A programmer writes source code (human-readable program text) in an editor.

COMPILE: She then uses a compiler to translate the human-readable source code into machine-readable .class files. If there are compile-time errors, the translation will fail, and the programmer will have to resume editing to correct the errors.

TEST: Once all compile-time errors have been eliminated, the programmer may test the program to ensure that it behaves properly. Testing typically involves running the program several times in a systematic way in order to see whether or not run-time errors occur in certain situations. If testing exposes run-time errors, then the programmer must return to editing her program. (Note, however, that absence of evidence does not constitute evidence of absence: a program that passes all of its tests may still exhibit run-time errors.)