First of all, a good programmer is someone who can debug code. More precisely who can debug his own code but also the code of another programmer. A good programmer must be able to dive in any code. Even if he doesn't understand all the instructions within the code he should understand the great lines of the code.

During development many bugs may occur but hopefully for us they are also many ways to test our programs and to prevent bugs from occurring. You can thus make unit tests, performances test, stress test or even functional tests. An important point to notice is that each test must be documented. A bug can sometimes appear again, and thanks to the documentation we can correct it again in a small amount of time.

A good technique to find and correct a bug is the divide and conquer technique. In fact, most programmers use this technique in their code unconsciously by separating their code in methods or in classes. This technique is to separate a big block of code into smaller ones to determine which part of the code contains the bug.

Another technique to find bug is to log. In fact, logging is mandatory in programming and is even a law. Logging allow us to see which data / circumstances make a bug appear. It also allows us to protect our application from attackers.

If a programmer wants to help other programmers he must document his code. Sometimes code is self-explanatory but in some other times it isn't so if they are some parts of shadow in your code write a few comments.

A programmer must always keep in mind that an error is easily made and thus don't panic if their code contains a bug. Even senior programmers make bug and sometimes a bug can appear due to a wrong interpretation of the user requirements.

Even if most programmers think otherwise debugging is one of the most important part of programming. Coding is one thing. A code that does what we told him is another one and debugging is there to help us in this task.