Assert is a funtion to test something that are supposed to be true, if it fail the test, then the program will raise AssertError, otherwise nothing happens

>>assert <test>, <message>

<test>: [bool] the test statement. (e.g. a==b, type(a)==str)

<message>: (oprional) [string] the message that shows when <test> is false

* The assert function will be ignored during program optimization.
* The assertion should be used in internal logic check rather than error handling

*As specified by*[*dasblinkenlight*](http://programmers.stackexchange.com/a/137167/175034)*: "Unchecked exceptions are designed to detect programming errors of the users of your library, while assertions are designed to detect errors in your own logic. These are separate issues that should not be mixed."*

e.g.

>> a = 10

>> assert a==5, “a should be 5”

==> “a should be 5”