Exceptions

The try statement has the following form:

Try:

<body>

Except <ErrorType>:

<handler>

Do the body of the try, if any error / problem crops up, handle it this way.

(it means that when the body has the error, such as Type-Error or Zero-Division-Error, **the program would execute the content in the except rather than show errors in the shell**)

P:

1. When Error-Type is nothing, it means that no matter what kind of the error happened in the body / once there is error, it would go directly into the content of the except and execute (no matter there exists return or not).
2. The body of the try can be the whole function
3. For multiple handling, there can be different kinds of errors. If an error occurs, python will test except looking for one that matches the type of error.

**A bare except** acts like an **else** and catches any errors without a specific exception type.

1. **If there was no bare except at the end and none of the except clauses match, the program would still crash and report an error**.
2. Exception is only for checking the error, it can be substitute of the if statement (like giving the constraint)

Except 里面的内容是为了更好地表达error的， 只要一出现错误，就立马执行里面的内容，不管里面有没有return， 即使是只有print sth 也是可以的。

Exception Handling for file opening

A range of reasons may fail for opening files

1. File not present or empty (reading)
2. Directory permissions do not allow file creation for writing
3. File permission do not allow reading or appending

The example can be seen in the lecture 14. py

Good sentence:

1. Often, all that can be done is for the program to exit gracefully with a more useful error message.
2. He has returned earlier.