Chapter 13 - Exceptions

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Exceptions

- An exception is a signal that a condition has occurred that can't be easily handled using the normal flow-of-control of a Python program.
- Exceptions are often defined as being "errors" but this is not always the case. All errors in Python are dealt with using exceptions, but not all exceptions are errors.

Try and except

- With try/except, you tell the python interpreter:

Try to execute a block of code, the "try" clause.

- If the whole block of code executes without any run-time errors, just carry on with the rest of the program after the try/except statement.

If a run-time error does occur during execution of the block of code:

- skip the rest of that block of code (but don't exit the whole program)
- execute a block of code in the "except" clause

Syntax

```
try:
     <try clause code block>
except <ErrorType>:
     <exception handler code block>
```

Example of try and except

```
try:
    items = ['a', 'b']
    third = items[2]
    print("This won't print")
except Exception:
    print("got an error")

print("continuing")
```

Another example

```
try:
   items = ['a', 'b']
    for i in range(5):
        print(items[i])
   #third = items[2]
    print("This won't print")
except Exception as e:
    print("got an error")
    print(e)
print("continuing")
```

Slides & Material

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