

Week 3: Exceptions

Common Errors

- Syntax Error - Problem with how you typed something
- Name Error - Variable example `print("Hello, World")`
name not found no closing " results in syntax error
- Value Error - input string instead of float, int instead of float etc.

How To Write Exceptions:

Try: # try to run code beneath

→ # Code

Except: Value Error: # `except ==` any error `ValueError` specifies
→ # Run this code if error or specified error what error it will run code for

Else:

if it doesn't receive an error, run this code optional break after

or → break

↓

Code below

also use `break` to leave loop + `return` to return value

Pass - Used to handle exception without doing anything with the error. Catch error but ignore it i.e. don't print anything or close program etc.

Except:

Except Value Error:

... **Pass**

Recap

Syntax Error - You typed something in wrong.
Example: `print("Hello, World")`
↳ No closing quotes result in syntax error

Writing exceptions:

try:

```
.... x = int(input("What's x? "))
```

except Value Error:

```
.... print("That's not an integer...")
```

else:

```
.... print(f"x is {x}")
```

Value Error - input is a string or float or integer at a time that it wasn't supposed to be.

example: Entering a string or a float in the above code block

Pass - A way to handle an exception silently. Without printing anything or closing program etc.

↳ **except Value Error:**

```
.... pass
```

Debugging - Method used for you to determine why certain code isn't working as intended

i.e. using `print` to have the computer display what it's doing

Debugging Methods

- Print

- Debugger (vs code)

↳ Includes breakpoints

Libraries - Functions pre-made given to you by python. Not a default function such as print but more so a def:() made already by someone else. To use a library, you need to **import** it at the top of your code.

ie: **module**

Line 1: import random # random being the name of a library
Line 2:
Line 3:

Instead of importing an entire module you can import only a section of it by using **import from** at the top of your code.

ie:

Line 1: from random import choice # **Narrow scope**

Line 2:

Line 3:

* Useful Random Notes

- .append returns inputs to a list

ie:

grades = [] ← stores to list

grade = float(input(" "))

grades.append(grade) ↑