

▼ Week 1: Prepare





Watch videos and complete problems to learn the Week 1 material. This module is not for credit since it is in the first week of classes. However, this material is required knowledge in the course, and you will need it to progress to Week 2. We encourage students to complete these modules sometime during the first week of class.

Challenges

➤	📖	Python as a Calculator ➡	Practice	✓
➤	📖	Python and Computer Memory ➡	Practice	✓
➤	📖	Variables ➡	Practice	✓
➤	📖	Visualizing Assignment Statements ➡	Practice	✓
➤	📖	Built-in Functions ➡	Practice	✓
➤	📖	Week 1 Prepare Exercise	Practice	✓

Watch videos and complete problems to learn the Week 2 material.

Challenges

>	 Defining Functions 	Practice	✓
>	 Type str 	Practice	✓
>	 Function input 	Practice	✓
>	 Docstrings and Function Help 	Practice	✓
>	 Function Design Recipe 	Practice	✓
>	 Function Reuse 	Practice	✓
>	 Visualizing Function Calls 	Practice	✓
>	 Constants 	Practice	✓
>	 Week 2 Prepare Exercise 	Credit	✓

Watch videos and complete problems to learn the Week 3 material.

Challenges

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|--|----------|---|
| ➤  Import: Using Non-Built-in Functions ➔ | Practice | ✓ |
| ➤  Type bool ➔ | Practice | ✓ |
| ➤  Converting between int, str, and float ➔ | Practice | ✓ |
| ➤  If statements ➔ | Practice | ✓ |
| ➤  No if required ➔ | Practice | ✓ |
| ➤  Structuring if statements ➔ | Practice | ✓ |
| ➤  More str operators ➔ | Practice | ✓ |
| ➤  str: indexing and slicing ➔ | Practice | ✓ |
| ➤  PyTA Practice (Basic) ➔ | Practice | ✓ |
| ➤  Week 3 Prepare Exercise ➔ | Credit | ✓ |

Watch videos and complete problems to learn the Week 4 material.

Challenges

➤	📖	Function print and Escape Sequences ➡	Practice	✓
➤	📖	str Methods: Functions Inside of Objects ➡	Practice	✓
➤	📖	for loop over str ➡	Practice	✓
➤	📖	Functions, Variables, and the Call Stack ➡	Practice	✓
➤	📖	Wing's debugger ➡	Practice	✓
➤	📖	while loops ➡	Practice	✓
➤	📖	PyTA Practice (If/Else) ➡	Practice	✓
➤	🎓	Week 4 Prepare Exercise ➡	Credit	✓







Watch videos and complete problems to learn the Week 5 material.

Challenges

▶ 📖 Comments ➔	Practice	✓
▶ 📖 Type list ➔	Practice	✓
▶ 📖 list methods ➔	Practice	✓
▶ 📖 Module typing ➔	Practice	✓
▶ 📖 Mutability and Aliasing ➔	Practice	✓
▶ 📖 Function range ➔	Practice	✓
▶ 📖 for loop over indices ➔	Practice	✓
▶ 📖 Parallel Lists and Strings ➔	Practice	✓
▶ 📖 PyTA Practice (Loops) ➔	Practice	✓
▶ 📖 Week 5 Prepare Exercise ➔	Credit	✓





Watch videos and complete problems to learn the Week 6 material.

Challenges

>	 Research Study	➔	Practice	✓
>	 Nested Lists	➔	Practice	✓
>	 Nested Loops	➔	Practice	✓
>	 Reading Files	➔	Practice	✓
>	 Writing Files	➔	Practice	✓
>	 Week 6 Prepare Exercise	➔	Credit	✓












Watch videos and complete problems to learn the Week 7 material.

Challenges

>	 Structured Files	➔	Practice	✓
>	 Tuples	➔	Practice	✓
>	 Type dict	➔	Practice	✓
>	 Inverting a Dictionary	➔	Practice	✓
>	 Populating a Dictionary	➔	Practice	✓
>	 Week 7 Prepare Exercise	➔	Credit	✓

Watch videos and complete problems to learn the Week 8 material.

Challenges

➤  Palindrome: Approaching the Problem 	Practice	✓
➤  Palindrome: Algorithm 1 	Practice	✓
➤  Palindrome: Algorithm 2 	Practice	✓
➤  Palindrome: Algorithm 3 	Practice	✓
➤  The Restaurant Recommendations Problem 	Practice	✓
➤  Restaurant Recommendations: Representing the Data 	Practice	✓
➤  Restaurant Recommendations: Planning the Program 	Practice	✓
➤  Week 8 Prepare Exercise 	Credit	✓

Watch videos and complete problems to learn the Week 9 material.

Challenges

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|---|---|--|----------|---|
| ➤ | 📖 | Testing Automatically Using doctest ➡ | Practice | ✓ |
| ➤ | 📖 | Writing a '__main__' program ➡ | Practice | ✓ |
| ➤ | 📖 | Testing Automatically Using pytest ➡ | Practice | ✓ |
| ➤ | 📖 | Choosing Test Cases ➡ | Practice | ✓ |
| ➤ | 📖 | Testing Functions that Mutate Values ➡ | Practice | ✓ |
| ➤ | 🎓 | Week 9 Prepare Exercise ➡ | Credit | ✓ |