

Introduction to Python using Codingbat

CSC 2310

In this lab you will begin learning Test-Driven Development (TDD) and the Python programming language by writing code using the [codingbat](https://codingbat.com/python) website.

The screenshot shows the CodingBat Python website in a web browser. The browser's address bar displays <https://codingbat.com/python>. The page features a navigation bar with links: [about](#), [help](#), [code help+videos](#), [done](#), and [prefs](#). Below the navigation bar, there is a login section with input fields for 'id/email' and 'password', a 'log in' button, and links for [forgot password](#) and [create account](#). The main content area is divided into two tabs: 'Java' and 'Python', with 'Python' currently selected. Under the 'Python' tab, there are eight problem sets arranged in a 4x2 grid. Each problem set is represented by a rounded rectangle containing a title, a star rating, a description, and a checkmark icon. The problem sets are: 'Warmup-1' (5 stars), 'Warmup-2' (5 stars), 'String-1' (5 stars), 'List-1' (5 stars), 'Logic-1' (5 stars), 'Logic-2' (5 stars), 'String-2' (2 stars), and 'List-2' (2 stars).

CodingBat code practice [about](#) | [help](#) | [code help+videos](#) | [done](#) | [prefs](#)

Welcome to Codingbat. See [help](#) for the latest.

[id/email](#)

[password](#)

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Java **Python**

Warmup-1 ★★★★★
Simple warmup problems to get started, no loops (solutions available)

Warmup-2 ★★★★★
Medium warmup string/list problems with loops (solutions available)

String-1 ★★★★★
Basic python string problems -- no loops

List-1 ★★★★★
Basic python list problems -- no loops.

Logic-1 ★★★★★
Basic boolean logic puzzles -- if else and or not

Logic-2 ★★★★★
Medium boolean logic puzzles -- if else and or not

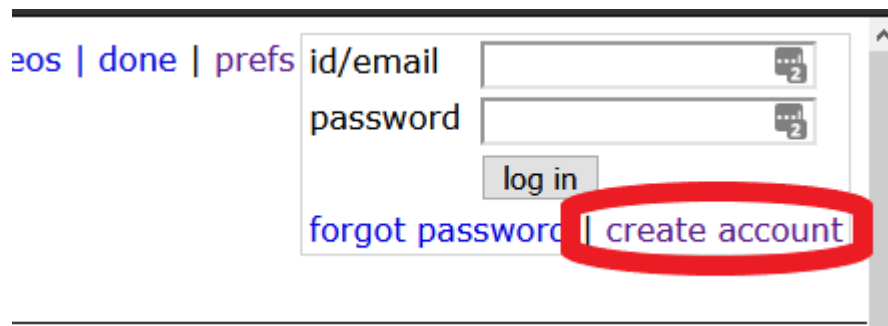
String-2 ★★
Medium python string problems -- 1 loop.

List-2 ★★
Medium python list problems -- 1 loop.

Pre-work

This laboratory makes use of the <https://codingbat.com/python> website, which contains several exercises for practicing programming using Python. The site uses a *Test-Driven Development* (TDD) approach for programming whereby tests are written first and the goal of the programmer is to make their code pass the test.

Before starting the lab, go to the above link and create an account using your TNTech email address by selecting the [create account](#) link. Create your account using your TNTech e-mail address.



eos | done | prefs

id/email

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Next, add your lead TA's e-mail address to the **Teacher Share** field, and your Section number to the **Memo** field using the **prefs** menu:

- Section 101 (T 8:00am) and 102 (R 8:00am): Aminul Islam (mislam49@tntech.edu)
- Section 103 (T 4:30pm) and 104 (R 4:30pm): Samuel Hassler (schassler42@tntech.edu)

The screens below show you what you can expect to see in the system.

CodingBat code practice

> [CodingBat Home](#)

Account Settings

Change password

Password must contain at least 6 characters

New Password show/hide

Teacher Share

Enter the email address of the teacher account. This will make your done page and solution code visible to that account.

Share To

Memo

Generally this is left blank. A teacher may ask you to fill this in.

Memo

Delete Account

Permanently delete account - cannot be undone

[privacy statement](#)

Laboratory Description

After creating and configuring your account (and during the assigned lab period), attempt and complete the following exercises:

- String-1/make_tags: <https://codingbat.com/prob/p132290>
- List-1/reverse3: <https://codingbat.com/prob/p192962>
- Logic-1/date_fashion: <https://codingbat.com/prob/p129125>

The approach you should use to complete these exercises is the following:

1. Add a **pass** statement to the code block
2. Click the "Go" button to observe the tests fail
3. Write the code to make the tests pass

After the laboratory session, and before the beginning of your next laboratory, you must complete the following exercises:

- String-1/make_out_word: <https://codingbat.com/prob/p129981>
- List-1/make_pi: <https://codingbat.com/prob/p113659>
- Logic-1/alarm_clock: <https://codingbat.com/prob/p119867>

In addition, you must complete at **least 4 more** exercises *excluding those from Warm-Up*.

Turn-in

Remember to add your lab instructor to the **Teacher Share** field in the *prefs* menu and your section number to the **Memo** field. **The TA's will create a snapshot of the lab completion report no later than 10 minutes after the assigned laboratory section ends.** You must complete the additional exercises before the end of the next laboratory.

This laboratory is worth 20 points.