

Each assignment consists of a written portion (typically six to nine problems) and a programming portion (typically three or four problems). Both parts are submitted electronically, and typically due at 4:30pm on a Thursday afternoon.

No late submissions will be accepted for either portion, for any reason. Instead, your lowest two scores will be dropped.

Submitting the written portion

Your solutions to the written problems will be submitted electronically on a site called Gradescope. Before submitting your assignment, you should scan it to a pdf file (unless you type your work). The following guide gives some suggestions for how to scan your homework with a smartphone.

https://www.math.brown.edu/~pflueger/math158/gradescope_scanning.pdf

You can also use a scanner or any other method, as long as you create a clearly legible pdf. Scanners are available in various libraries on campus.

After you have scanned your assignment to a pdf, submit it on gradescope as follows.

1. Go to <http://www.gradescope.com>, click “Sign up for free,” and select “I am a student.”
2. Use the course code 9256JM, your name, and your brown email address to sign up.
3. After logging in, select “Math 158” and the appropriate homework assignment.
4. Select “upload pdf” to submit your work in pdf format.
5. For each written question, select the pages of your submission where your solution appears.
6. Click save.

After your assignment is graded, you will be able to see your score on the written problems, along with comments, on gradescope.

Programming problem submission instructions

We will use a platform called hackerrank for the programming problems. The platform is designed for programming contests, so unfortunately the site will refer to the problem sets as “contests,” and to you as “competitors.” **Please disregard any reference to the problem set as a contest.** This vocabulary is unfortunate for our purposes, but the site’s features are very well-suited to our needs.

You should sign up for hackerrank and submit your code as follows.

1. Create an account on the website hackerrank.com. **Use a pseudonym under “First and Last Name” when you sign up;** otherwise other students in the class will be able to see your name when they look at your code. If you forget to do this, you can edit your name in your profile settings later. (I have received permission from hackerrank to ask you to do this).
2. After you register, hackerrank will choose a username for you based on your email address. If it has your name in it, click “edit username” in the dialog that comes up, and choose something anonymous. You can also do this afterward in your profile settings later.

3. Once you have registered, email your username to me at `pflueger@math.brown.edu` and to our grader Daniel Keliher at `daniel_keliher@brown.edu`, so that we can link your scores to you.
4. I suggest disabling most email notifications from hackerrank. To do so, click on your username in the upper right, click “Settings,” then “Emails” (under “Preferences” on the left sidebar) and then adjust your settings.
5. Visit the url printed on the problem set under “programming problems” and enter the “contest.”
6. Each programming problem will occur as a separate “challenge.” You will find some more specific information about the parameters of the problem there, and a place to enter your code.
7. You may either enter your code directly in the box at the bottom of each challenge, or upload a source file (I recommend writing and testing your code on your own machine and uploading a file).
8. There are two buttons below the code window: “Run Code” and “Submit Code.” The “Run Code” button will run your code on a small batch of sample test cases, showing you both the input and the output. Typically the sample cases include some very small cases that you can inspect by hand. This should help you debug your code. Clicking “Run Code” does not make any record of your code or generate a score.
9. The “Submit Code” will submit your code for grading, and display your score for that submission. You may submit code for each problem as many times as you like before the deadline, and only your highest score will count. After each submission, the website will run your code on the full set of test cases, and compute your score. You will not be able to view the content of the incorrect test cases until after the due date (this is to prevent you from being able to hard-code the individual answers).

At 4:30pm on the due date of the assignment, the assignment will stop accepting submissions for credit. At this time, all test cases will become viewable, and also all submitted code from the other students in the class will be viewable. You are encouraged to read the other solutions and learn from them. You will also be able to make more code submissions and view what your score would have been, although these will no longer count for credit.

Your score for each programming problem will be whatever score is displayed on hackerrank. I will not do any further testing of your code after the deadline.

Additional notes

- If you are new to programming, or new to Python, there are a number of good tutorials online. I will link to some on the main course webpage. If you discover any resources on your own that you find particularly useful, I would like to hear about it and may add a link on the course page.
- I will also spend some time showing how to do basic tasks in Python on Monday the 12th (if you have prior programming experience, you need not attend class on Monday).

- On Monday I will also work through the following sample problem set.

<https://www.hackerrank.com/m158-2016-demonstration-pset>

I encourage you to bring a computer to class to follow along. You may also submit solutions for this sample problem set in order to practice using the platform. You may also want to look at the problems on hackerrank's "warmup contest", which has example code in every language supported by the platform.

<https://www.hackerrank.com/domains/algorithms/warmup>