ENGG1811: Computing For Engineers

2025 Term 2

Mock Exam and Final Exam Tips

Week 10: Monday 4th August, 2025

Monday 13:00 - 15:00 | TETB LG34

Today

Reminders

Study Tips

Tips for the Final Exam

Reminders

Final Exam Date/Info

- The final exam is on the 28th of August (a Thursday).
- It is three hours long.
- You will receive an email indicating which lab you will take the exam in.
- In the exam, you will be given a sheet of writing paper and may bring pens and a clear water bottle.
- In the exam environment, you will have access to relevant lecture slides and Python documentation.
- Make sure to bring your student ID or other valid photo ID.

Study Tips

Preparing for the Final Exam

- The way to prepare for the final in roughly the order of most-to-least effective:
  1. **Re-do all your labs!**
     - The best thing about doing this is that you have the solutions if you need them, and it's your own work too!
     - Try to do it without looking over your answers, but if you're having a hard time, have a quick glance at your work to jog your memory
  2. **Re-do both assignments**
     - Same as above: it's good that you have your solutions ready, but do the assignments without looking over at your submissions if you can!

Preparing for the Final Exam (Cont)

- Continuing on:
  3. **Do the sample exam**
     - It is *crucial* that this is done under test conditions — timed, no internet, and no external resources or help of any kind
  4. **Live coding session recordings**
     - The recordings for all live coding sessions are uploaded at the end of term
  5. **Lecture exercises**
     - There are certain lecture topics and exercises you can try
  6. **Course forum**
     - Try looking through the Q/A on the forum — see if you can help others out

Tips for the Final Exam

Doing the Final

- There are only five or so questions in the final, so read through each question stem *carefully*
  - Don't stress out if you see a big wall of text! It is legitimately there to *help* you, and *not* to hinder you
  - Many students rush over the reading and miss crucial details or steps — do not let this be you!
- Unless you get astronomically lucky, there is bound to be *at least one* question that will stump you
  - This is not a cause for concern, and is utterly normal and natural
  - A great skill to have is to know what to do, when you have no idea what to do! We will go over this soon

More Tips on Doing the Final

- Style is not marked
  - However, displaying your work clearly and (if you're particularly at a loss) writing comments, *might* score you a few partial marks
- Questions in the final are roughly in the order of easiest to most difficult
  - But do not take this as gospel! Remember, the final exam is set by instructors who have a warped understanding of what is difficult
  - It is not at all uncommon that question 4 is significantly easier than question 3, or for question 5 to play to your strengths more than question 2
  - That is to say, do not stay too long on a single question under the impression that all the other questions will definitely be harder — because this can certainly not be true

Problem-Solving Strategies

So, what do you do when you don't know what to do?

- Get specific
  - Can you think about a particular example, and see what you're meant to do there?
  - Can you solve the problem if you ignore a particular requirement, or condition?
- Whip out the old pen-and-paper
  - Hopefully trying to solve the problem by hand can unlock a light-bulb moment
  - This is *not* you writing code on paper — this is you trying to solve the problem as if it were *not* a coding problem, and then you are translating your work into code

Debugging in the Final

- Debugging without the internet is probably one of the nine circles of hell; stay calm, and be under the expectation that you will get an error message that you will not understand
  - `print()` is your best-friend
    - Not sure why your variable is not giving the correct answer? `print()`
    - Unsure what happens to your list after each iteration of a loop? `print()`
    - Cannot for the life of you figure out why an if-statement is not going through? `print()`
  - Comment out code, and work slowly
    - If you suspect a chunk of your code to be responsible for a bug, comment it out and see if everything else that precedes it is working as intended
    - Then slowly uncomment each part of the chunk until you encounter the bug again

Final Word of Encouragement

- All the advice above is somewhat idyllic — in the pressure of the final exam, it will be very difficult to remember each & every little tidbit
- Your goal is not to be a machine that knows in every single circumstance what someone else has told you to do
  - Everyone has different ways of solving problems, and different temperaments when they encounter something challenging
- Your goal, instead, is to prepare as much as you can, and to demystify every obstacle you will potentially face
  - Hopefully during your preparation, you will find natural opportunities to use what I've said above, so that you can see if they resonate with you personally

That's a wrap!

- If you have any final questions, please($\times\infty$) do not hesitate to ask
- Please, please fill out the MyExperience survey — it really helps! :) You can be as honest as you'd like!

Feedback

Feel free to provide anonymous feedback about the lab!

Feedback Form