ISTA 352

General Homework Instructions

For contribution to the final grade and due dates see the assignment web page.

1. Handing in your work

To hand in your assignments, send me email with the following subject line:

ISTA 352 hw<N>

where <N> is replaced by the assignment number which will be an integer between 1 and 5.

Your email should have either one or two attachments. The first attachment should be a PDF document with your answers and/or the results of any programs that you write. Your PDF should be named

<netid>-<assignment>.pdf (e.g., kobus-hw3.pdf).

The second attachment should be a gzipped tar file (zip format is OK also) of a directory that includes any extra material such as any code that you write. You need to hand in your programs, but I won't necessarily look at them unless your write-up suggests a problem that I might be able to resolve. The directory should be named

<netid>-<assignment>

The attachment itsef should be named

<netid>-<assignment>.tar.gz (e.g., kobus- hw3.tar.gz).

or

<netid>-<assignment>.zip (e.g., kobus- hw3.zip).

Make sure you tar/zip the directory, as opposed to its contents, so when I unpack the attachment I get a directory.

Please follow the above instructions carefully, as the naming conventions enable automated filling of your materials.

2. Assignment question weights, hints, bonus marks, etc.

For simplicity, problems are generally all worth the same, except ones marked by "+" that are expected to substantively more time consuming, and are worth double. Two "+" means triple value, etc.

Questions marked by @ will not be graded and need not be handed in. However, you are responsible for being able to do them. You should read these questions, think through what you would do for them, and only then consider skipping them if they do not seem to be useful.

Questions marked by one or more * are optional problems which are either challenging, or may simply require background that many students do not have.

Any non-challenge problem can be replaced by challenge problems with collective value is at least that of the problem being replace (e.g., a non starred "+" problem with two "*" problems without "+"). Please make it clear that this is what you are doing (e.g., for a required problem you could answer "see optional problem #3"). The point here is to enable students to avoid problems that they feel are not instructive.

Extra problems (please indicated in your answer when you are doing an extra problem) are eligible for modest extra credit (extra credit does not scale linearly and is up to whim of the instructor). The maximum score for an assignment will be capped at 120%. The maximum score for all assignments taken together is capped at 55/50.

Hints for some problems may be provided in advance, or due to popular request. Good form demands seriously thinking about the problem before peeking at the hint. If you make use of a hint, make a note of it. This is a matter of academic honesty.

Similarly, if after a solid effort to do a problem yourself, you get unstuck by consulting with someone or by making use of some other resource, simply make a note of it. For example, you might say that you had a glance at the solution to the same or similar problem solution in a particular source, and then attempted to recreate for yourself. This is better than being completely stuck, or copying the answer blindly, which of course is academic dishonesty.

3.   Writing your assignment

The instructor considers preparing your assignment a form of writing, and writing is hard work! Good writing tells a story efficiently. To do it well, you need to develop an intuition for what the reader wants to know, which is often a bit different from what you want to write.

Assignments will be graded roughly 65% for content and 35% for exposition. It is not possible to provide detailed feedback on your exposition as part of the grading process, but the instructor is happy to discuss exposition in person, either with individuals, or as a group.

Obviously, not all answers will require a lot text. Showing your work, or telling the reader what you did (and why) does not always take a lot of space. However, having a good sense of what needs to be said is an important skill worth developing. In some cases, snippets of code may make sense. In other cases, a figure with a good caption will be most of what is needed. And finally, sometimes a very short answer is what is needed.

Checklist (version one):
1. Did you read what you wrote and edit it to make it better?
2. Does your answer actually address the question? Is it obvious that this is the case?
3. Does your answer demonstrate your understanding by showing how you got the result, and why the key steps were taken or are justified? Remember, the instructor generally asks questions for a reason. It may help to think for moment about what that may be.
4. Do your figures have captions? Do the captions tell the reader what they are suppose to conclude from looking at the figure. You do not need to tell the reader what is visually obvious ("the blue bar is taller than the red one") but you could tell them the main point ("the blue bar is taller than the red one because, on average, people that exercised more reported being happier").
5. Can the instructor read and understand your answer quickly? If your answer involves writing more than few sentences, are the paragraph breaks sensible? Does the first sentence of the each paragraph indicate the main idea, and whether the rest of the paragraph can be skipped if reading quickly? If you read the first sentence of each paragraph in sequence, does the flow make sense? (This is a good trick to apply to section and sub-section headings in longer documents).
6. If you read your work objectively as a naive reader, does it make sense? This is sometimes easier to do if you come back to the assignment after a day or two. Of course, this requires starting it early enough. If something is complete and correct (locally OK), and yet hard to follow, you should reconsider the order that you tell the reader the story.
7. Did you spell check?