

# Submitting Computer Homework

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In order to make it easier for you to turn in your homework, and easier for the person grading them, I will outline a standard way to submit computer homework. Generally, you turn in two or three parts of the assignments:

1. written portions
2. program code
3. plots

Written portions are the written answers for the problems. Program code consists of your actual program (or programs) that you typed in yourself. The plots are graphs that your program generates and displays on the screen.

To submit your computer program, use ChIDE to open your program and print them.

To complete and submit your homework, please follow the following steps.

## 1 Install a C/C++ Interpreter and C-STEM Studio

Download and install the latest version of the C/C++ interpreter Ch Professional Edition from <http://www.softintegration.com> or in a web site given by the instructor.

Download C-STEM Studio from <http://c-stem.ucdavis.edu>.

## 2 Write Your Program

Each homework assignment will typically consist of several programming problems. Some of the problems will be from your textbook, while others may be directly stated on the homework assignment handout. If you are writing a program from the textbook, please name it like so:

```
chap#ex#[a-z].c
```

For example, if you wrote a program for Part 'b' of problem 4 in chapter 6, you would name your program file

```
chap6ex4b.c
```

If a problem is only listed as, for example, "Problem 8" in your handout with no reference to the textbook, you may name your program file

```
problem8.c
```

## 3 Run Your Program

### 3.1 Run from ChIDE in Windows, Mac OS X, Linux including the platform for Raspberry Pi

Run your program based on *ChIDE User's Guide* available under ChIDE Help menu of ChIDE. ChIDE is distributed along with Ch Professional Edition. *ChIDE User's Guide* is also available at <http://www.softintegration.com/docs/ch/chide/>

### 3.2 Run from Ch Command Shell

1. Launch a Ch command shell. In Windows and Mac OS X, just double click the icon of Ch on the desktop. In Linux, type 'ch' in a command shell.
2. Change the directory where your program is located.
3. Clear the screen by typing command  
clear
4. For program myhello.c, run it as follows:

```
~/MAE254> myhello.c > output.txt
```

output.txt is the file which stores the output of your program.

5. Open Notepad or any other text editor to open the output.txt.

## 4 Obtain a Screen Shot

### 4.1 Method 1: Obtain a Screen Shot in Windows

1. Select a window you would like to capture.
2. Press "Alt" + "Print Screen". (Short cut for capture current window)
3. Open MS paint or MS word, and then press "Ctrl" + "v" to paste it.

### 4.2 Method 2: Obtain a Screen Shot in Mac

1. Press "Apple" + "Shift" + "4". (Short cut for capture selected screen)
2. Press "Space". (Allow you to select a window to capture screen)
3. Click on a window you would like to capture.
4. The screen shot of the window will be saved in a new picture file located on your Desktop.

### 4.3 Method 3: Use GIMP to Obtain a Screen Shot in Windows, Mac, or Linux

Download GNU Image Manipulation Program (GIMP) from <http://www.gimp.org/windows/> for Windows and <http://www.gimp.org/macintosh/> for Mac OS X. It can be used to acquire an image from the screen using the following procedure.

1. Click menu File,
2. click menu Create or Acquire,
3. click menu Screen Shot,
4. click Grab. Then, move the cursor to a window to be acquired.
5. Save or print out the acquired window.

## 5 Print a Plot

### 5.1 Print a Plot in Windows

One of the following methods can be used to print a plot in Windows.

- Run a Ch program with plotting, click the upper left corner of the window with plotting.
  - Select print from option menus, configure and printing accordingly.
- Run a Ch program with plotting, click the upper left corner of the window with plotting.
  - Expand the 'option' tab and click on 'Copy to Clipboard' to save the plot to the clipboard.
  - Open MS Word or Paint. Paste the plot from clipboard to MS Word or Paint.
  - Print out the plot using Word or Paint.
- Run a Ch program with plotting, click on the plotting window.
  - On your keyboard, press "Alt" + "PrintScreen" to save the plot window to the clipboard.
  - Open MS Word or Paint. Paste the plot from clipboard to MS Word or Paint and save the file. In Paint, you can save the file in JPEG or PNG format using the file extension .jpg or .png.
  - Print out the plot using Word or Paint.
- Within your Ch program related to plotting, use plotting member function to generate a plot in JPEG, PNG, or postscript file, as shown below.

```
plot.outputType(PLOT_OUTPUTTYPE, "jpeg", "filename.jpg");  
plot.outputType(PLOT_OUTPUTTYPE, "png", "filename.png");  
plot.outputType(PLOT_OUTPUTTYPE, "postscript eps", "filename.ps");
```

Print out the plot in JPG or PNG file using a Web browser. Print out the plot in postscript file using acroread or program **GSview**. Or upload your image file in your word document and print out the document.

### 5.2 Print a Plot in Mac OS X or Linux

One of the following methods can be used to save a plot in Mac or Linux.

- For Mac users, AquaTerm will open after you plot in ChIDE. In AquaTerm, on the top menu bar, click on 'File' and then click on 'Save'. You can directly save the plot in a PDF or EPS format with file extension .pdf or .eps. You can print out the plot directly using AquaTerm or upload your image file in a word document and print out the document.
- Within your Ch program related to plotting, use plotting member function to generate a plot in JPEG, PNG, or postscript file, as shown below.

```
plot.outputType(PLOT_OUTPUTTYPE, "jpeg", "filename.jpg");  
plot.outputType(PLOT_OUTPUTTYPE, "png", "filename.png");  
plot.outputType(PLOT_OUTPUTTYPE, "postscript eps", "filename.ps");
```

Print out the plot in JPG or PNG file using a Web browser. Print out the plot in postscript file using acroread or program **GSview**. Or upload your image file in your word document and print out the document.

## 6 Submitting Your Computer Programs

Once all of your programs are running and you are satisfied with the results, you are ready to submit your programs. In addition to the hardcopy, computer programs also need to be submitted via SmartSite at <http://smartsite.ucdavis.edu>. To submit your homework, please perform the following steps:

1. Log into the website <http://smartsite.ucdavis.edu>. Log in with your Kerberos username and password.
2. Select the class you wish to submit homework for. In this case, it will be labeled “MAE 254”.
3. Click on “Assignments” in the menu bar.
4. Click on the name of the assignment to open it.
5. All program code which you have written must be attached, use the “Add Attachments” button to attach them.
6. Once *all* of your computer programs have been attached, you may preview it by clicking on “Preview”.
7. Once you are satisfied, click “Submit” on the bottom of the screen. After you have submitted your computer programs, you will no longer be able to access your assignment.

These instructions were taken directly from the SmartSite website. They may be found by going to the SmartSite website at <http://smartsite.ucdavis.edu> and clicking on the button labeled “Help”.