

Homework Assignment #10
Flow Chart due Sa, March 20, 8am and
Main Project Talks due Tue, March 23, 10:20 am and
First Version of Main Project Program due Sat, March 27, 8:00 am

Flow Chart
due Sa, March 20, 8am

Write a flow chart for your main project program. Be as detailed as possible. This can be handwritten, whatever is easiest. This might even mean that you have one less detailed flow chart and then more detailed flow chart elements. For the more detailed flow chart(s) you may want to list the main variables for your program

You find examples for flow charts for the random walk analysis (see your class notes) and the posted DLA flow chart. In the case of the DLA program you would specify the lattice array as one of your variables and x, y as integer variables for the random walker position.

You will need this flow chart (and list of variables) for writing your program. You might even want to start working on the core parts of your main project program. My major advice, however, is that you write your program successively. Do not write the whole program at once, but instead step by step and test each step as you go.

Main Project Talks

On Thursday, **March 23**, 10:20 am, main project talks will be given by **Bryant, Weiru, Josh, Noah, Justin, Gavin, Max, Casey**. Content of the main project talks is the same as the content of the first main project papers. For more information please see our webpage in the sections “In-Class Work” and “Guidelines for Main Project”. Please feel free to ask me in case of questions.

Everybody, please put your talk slides (pdf-file or powerpoint or whatever you used) into your `~/share.dir/` and give read permission.

First Version of Program
due Sat, March 27, 8am

1. First Version of Your Main Project Program:

Start with indicating on your flow chart in which order you will implement each part of your flow chart. For example almost all of your projects start with some initialization, so write a “1” next to the initialization box of your flow chart. Many of you have a time-loop, most likely you will not want to implement the time-loop next (unless you set your loop to do only one single step) but instead look for the most inner loop you will need to program and work on these commands first.

After having a plan for the order of writing the pieces of your program, start with “1”, program it, and test it. Then work on “2” and test it, etc.

The first version of your main project program is due March 27, 8am. You will get a chance to work Tue, March 25, in class on your project. Make sure that you have an

almost complete version ready to work with on Thursday, March 24 in class. Only via trying to write the program, you will come across the little devils in the details.

Start working on the core pieces of your main project program. My major advice is that you write your program successively. Do not write the whole program at once, but instead step by step and test each step as you go.

As always, please feel free to ask questions. Office hours are posted on our course webpage. Only by trying to write the program, will you realize what your questions are. I hope that you will enjoy this type of puzzle solving. (I do very much, so I am always happy to think about questions/tasks you run into with your project.)

By Wed, March 27, 8:00 am, put your python-program in your `~/share.dir/` and give read permission, so

```
cp programname.py ~/share.dir/  
chmod a+r ~/share.dir/programname.py
```

where `programname.py` is your python-program.