Problem Set Object-oriented programming - MIT

In this week's problem set, we're going to discover some benefits of object-oriented programming. You can get the problem set instruction and distribution code from the following link (MIT Problem Set 5). The tasks and information on what you need to do in particular are in the zip that you download above.
Additional information on the MIT problem sets in general can be found here MIT Open Course Ware.

CS50IDE vs. Own IDE

Since this is the first time that you are not solving a CS50 related problem, we would like to encourage you to install your own IDE on your computers.Furthermore, if you're going to code in the "real-world", it is a particular skill to set up your own development environment.
You can also use the CS50IDE to work on the problem set and run MIT's unit-tests there to check your code, but you cannot use the graphical user interface that the MIT implemented for the tool you're going to program.

Installing a development environment

If you choose to install your own environment you need to make two decisions.

1. Python distribution

First, you need to install a so-called python distribution, so that your computer can interpret the Python language and execute Python programs.
Therfore, you have two choices:

1. Pure Python
2. Anaconda

There are no particular benefits choosing either one of the above. However, Anaconda has some additional packages to the basic python frames already implemented. I usually prefer to install additional packages on my own, which is why I mostly stick to basic python, but you can also use the Anaconda distribution.

2. Integrated Development Environment (IDE)

After you have installed a Python framework, you need to choose the IDE that you want to install. There are plenty of free IDEs for python. Just to name a few examples:

- Spyder
- Visual Studio Code
- PyCharm with free student license
- ...

In general you can set up any of the IDEs, however, I personally recommend you to use PyCharm. You can get all jetbrain tools as student for free if you follow the JetBrains link and register with you university email address. Because PyCharm is very powerful, I think it is a good choice as your very first own programming environment.