

Data Structures & Programmatic Thinking

Hardware

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Plan for this session

- Learn a bit about hardware

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- Try the Spyder editor

CPU



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- Speed measured in hertz
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- More computing power is achieved through more cores

RAM

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- Not persistent



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- Think of it like a big shared blackboard
- Divided in addresses
- Not persistent
- Fast (Random Access)



HDD / SSD

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- Slower than RAM

HDD / SSD

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- Persistent
- Slower than RAM
- Higher capacity than RAM

Development Environment

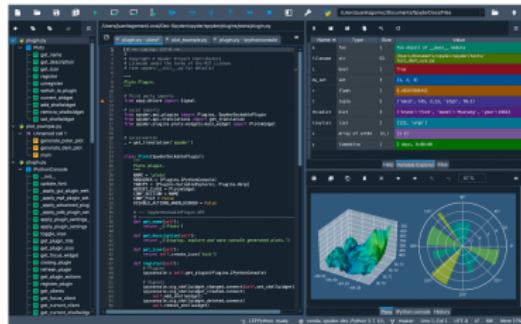
Anaconda

Does everybody have Anaconda installed?

Spyder



The
Scientific
Python
Development
Environment



Spyder

Spyder is the editor we're going to use to develop Python programs.

Review

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- **CPU** is the *computing* part of our computer
- **RAM** is used for the runtime of our programs to hold volatile data
- **HDD / SSD** stores non-volatile data, it's **way** slower than RAM. (<http://norvig.com/21-days.html#answers>)