Python

Who and why

Who

- Ninjas who have blue belts in scratch

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- Ninjas who have blue belts in scratch
- Anybody who tried Python before and wants to continue
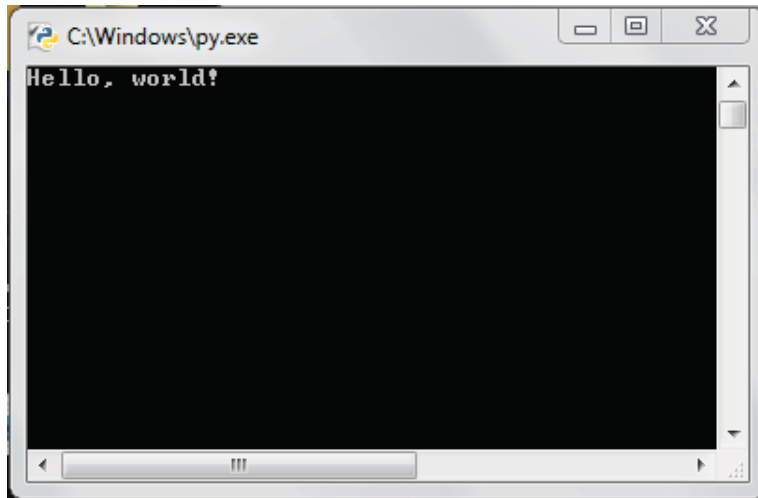
Who

- Ninjas who have blue belts in scratch
- Anybody who tried Python before and wants to continue
- Ninjas who are starting off with us and aren't interested in Scratch
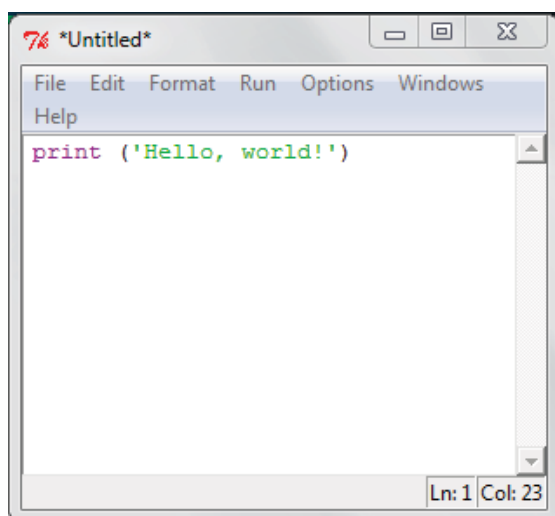
Typing

- Comfortable with a keyboard, don't have to be able to type but able to find keys easily

Why Python?

- Easy to read and understand
  - It does what it says it will do
  - Simple syntax; less clutter
    - The **syntax** of a computer language is the set of rules that defines the combinations of symbols that are considered to be a correctly structured document or fragment in that language.

Hello world in Python

Hello world in C

```c
#include <stdio.h>

int main(void)
{
    printf("Hello, world!\n");
    return 0;
}
```

Why Python?

- Python is a general-purpose language
  - Create any type of program or software. Games, Web, Graphical User Interfaces and Scientific Computing

Why Python?

- Python is used in the real world
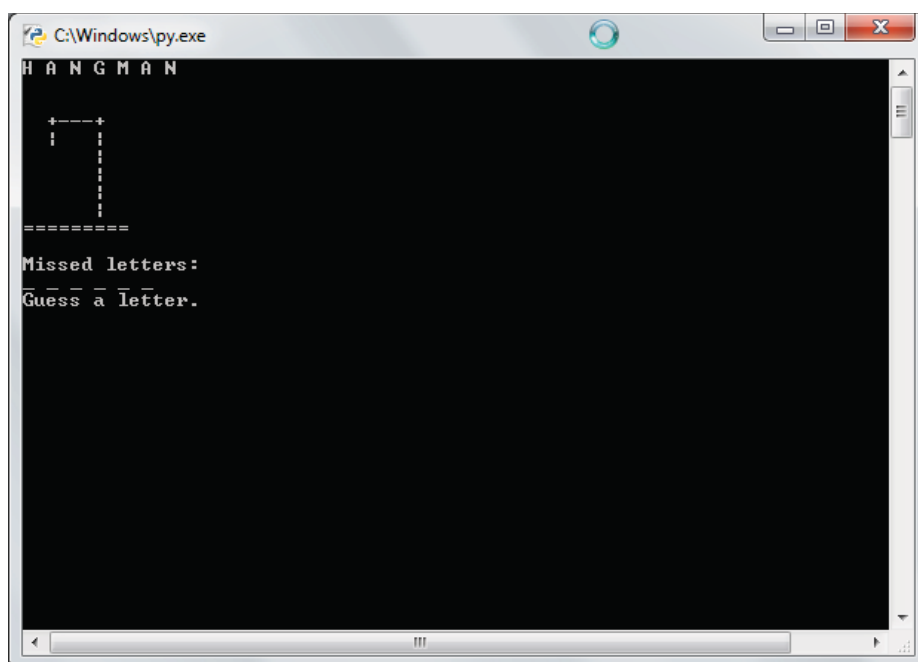 - Google and Facebook use it

Why Python?

- There is a huge amount of help online

Why Python?

- Easy to read and understand
- Python is a general-purpose language
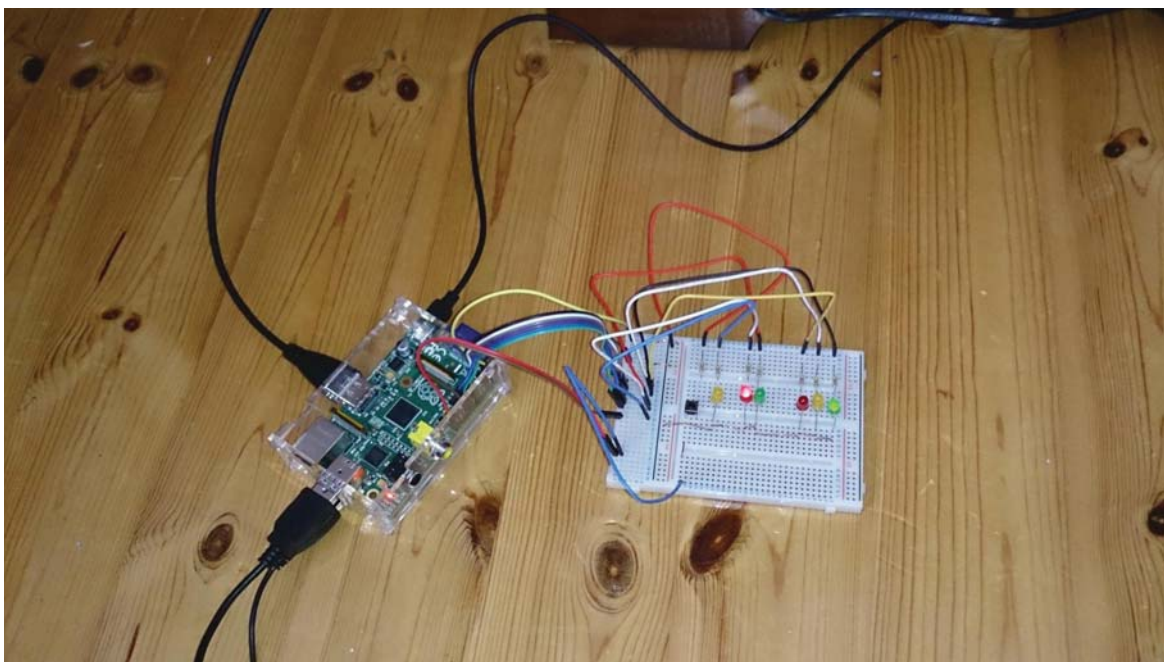- Python is used in the real world
- Lots of online resources

What are we going to do?

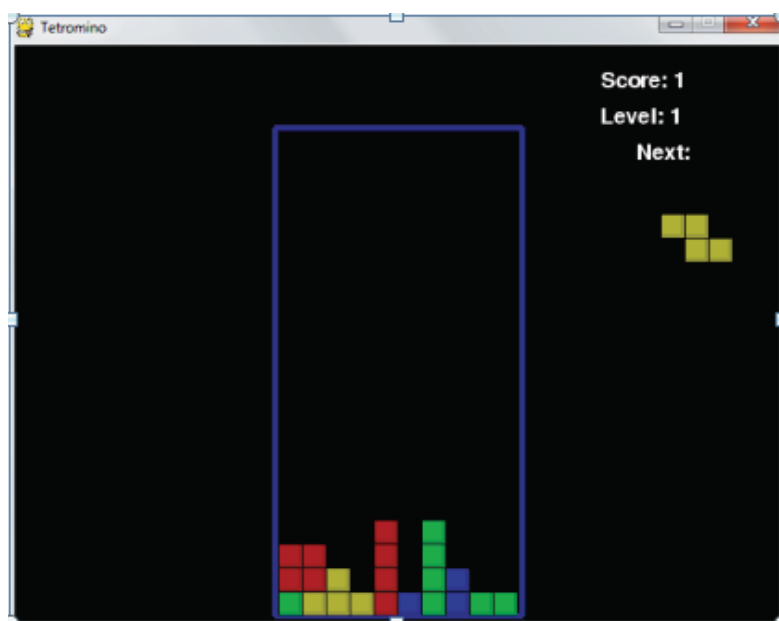- Command line interface at first; Hangman

What are we going to do?

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- Graphical User Interface games with Pygame

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- Command line interface at first; number guessing game
- Raspberry pi with breadboard; traffic lights etc.
- GUI games with Pygame