Teaching London Computing

Topic 1.1
First Python Program

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Aims

- Writing the first Python program
  - Creating files
  - Comments
  - Layout

- Using 'print'

Python Program

- A program is a document
  - Lives in a file (best to name it with extension .py)

```
print("hello")
```

- Much simpler than Java (or C♯)

Comments

- Comment explain a program

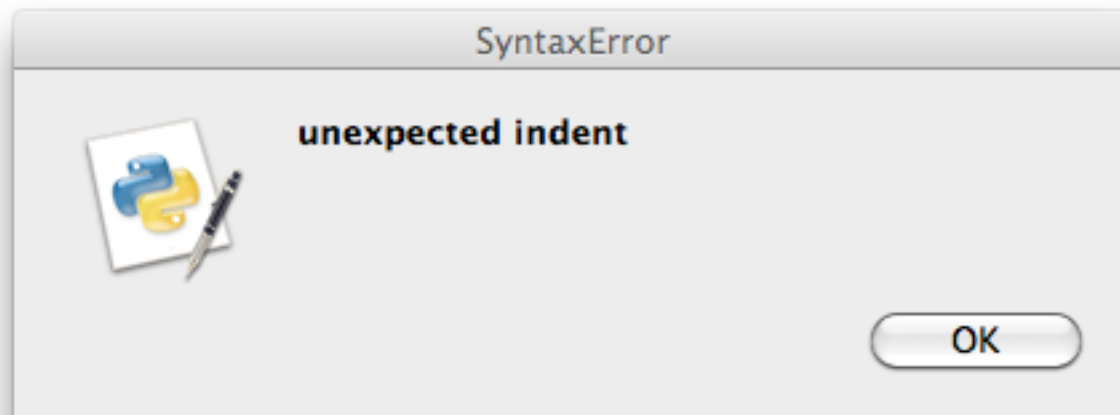```
# This program prints a greeting
print("hello")
```

- Comments can be used to help plan a program

# Layout

- An important feature of Python
- Indentation matters!

Always start in the same column

```
#This program does not work
print("hello")
   print("hello again")
```

SyntaxError

unexpected indent

OK

The 'print' function

- The 'print' function is used to output strings or numbers

```
print("hello", "world")
```

```
print("hello", 99)
```

- In these examples
  - The print function has two expressions
  - The expressions are printed with a space between them

Calculation

- Python can also do a calculation
- Example

```
>>> print("Average is", (30 + 40)/2)
Average is 35.0
```

Input

- A make a flexible greeting program let's ask the name first

```
#Greeting anyone
name = input("What's your name?")
print("Hello", name)
```

- The output is (if you type the letter underlined):

```
What's your name?William
Hello William
```

Summary

- A Python program is a file containing statements
  - Simple!
- 'print' for output
  - String and numbers

Note
- Think of print and input as a **commands** or instructions
- Properly, they are called functions
- We will soon meet other functions