HKUST Future-Ready Scholars
Introduction to Game Programming using Python

Part 1: Number Guessing Game

20 April 2024

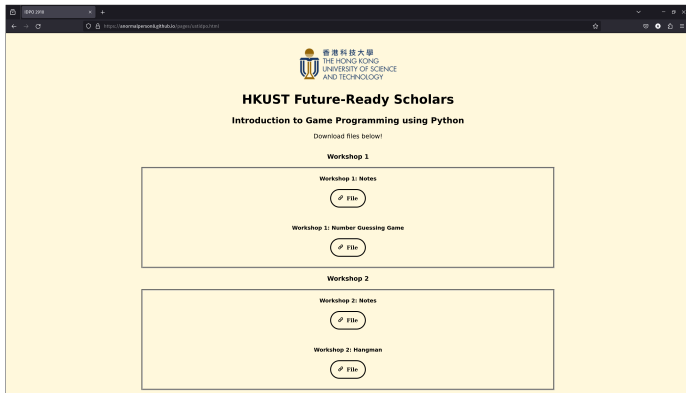THE HONG KONG
UNIVERSITY OF SCIENCE
AND TECHNOLOGY

We will use Google Colab for the workshops.
https://colab.research.google.com/
You must have a Gmail account for it, create one if you do not.

All materials today are at:
https://bit.ly/ustidpo

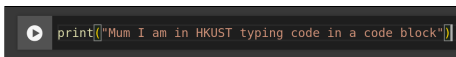Download all files that belong to **Workshop 1** today.

Now upload your Jupyter Notebook file with **Files** $\rightarrow$ **Open Notebook**.

Upload the file **Number**-**Guessing.ipynb**.

Using Jupyter Notebook

You can type your code in these blocks. We call these blocks code cells.

```
print("Mum I am in HKUST typing code in a code block")
```

You can run a code cell with the button on the left.

```
print("Hello World!") # Prints "Hello World!"
```
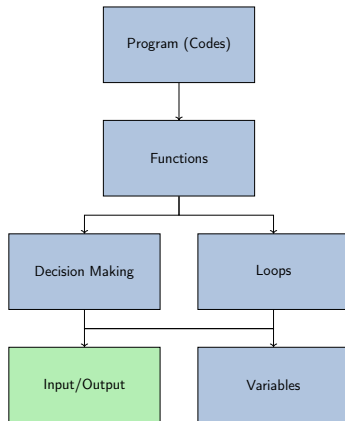
World of Game Coding

Did you know? Python was made by someone who was bored.
It's a language designed to be almost as understandable as English.
You will be using Python 3. Why? Because Python 1 are 2 are too old.

This is the logo of Python.

Contents

```python
print("This is the print function.")
```

The first thing in Python - `print()` function

`print()` is a function that lets you print something, also known as text output.

```python
print("Word") # This prints the word "Word".
```

Examples:

```python
>>> print("Hello World")
Hello World
>>> print("Haha hehe")
Haha hehe
```

Printing multiple things

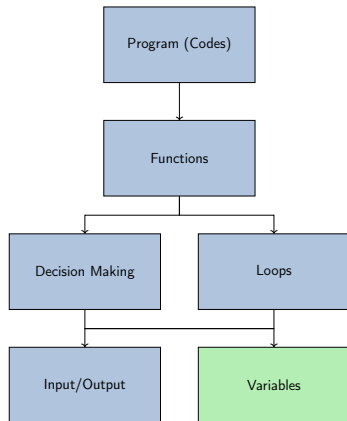You can use a comma (,) to separate different things with a space.

```
>>> print("Alpha", "Beta", "Gamma")
Alpha Beta Gamma
>>> print("Haha", "hehe")
Haha hehe
```

Contents

Variables

Imagine you borrow a box from the computer.

Give it a name and a value, you can now recall this value with the name!

Variables

The code usually goes:
variable_name = data
This means whatever data is, it is now stored in a variable with name
variable_name.

Some basic variable types:

```
a = 5        # This is an integer (int) stored in a
b = True     # This is a boolean (bool) stored in b
c = 3.2      # This is a float (float)  stored in c
d = "abc"    # This is a string (str)   stored in d
e = 'abc'    # This is also a string    stored in e
```

The End
Made in LaTeX
Last updated: 29 Mar 2024