Introduction

BY DR. SABEEHUDDIN HASAN

Why Python?

▶ Python is an incredibly efficient language:

  ▶ Your programs will do more in fewer lines of code than many other languages would require

  ▶ Your code will be

    ▶ easier to read,

    ▶ easier to debug, and

    ▶ easier to extend and build upon, compared to other languages

▶ People use Python for many purposes:

  ▶ To make games,

  ▶ Build web applications,

  ▶ Solve business problems, and

  ▶ Develop internal tools at all kinds of interesting companies

Getting Started

► Need to check whether a recent version of Python is installed on your computer

► Also install a text editor to work with your Python programs

► Latest version is Python 3.11

► You can run Python's interpreter in a terminal window, allowing you to try bits of Python code without having to save and run an entire program.

```
>>> print("Hello Python interpreter!")
Hello Python interpreter!
```

Getting Started

► The three angle brackets (>>>) referred to as a *Python prompt*, indicates that you should be using the terminal window

► **VS Code Editor**

  ► *VS Code* is a powerful, professional-quality text editor that's free and beginner-friendly

  ► Can be installed on all modern OS and supports most programming languages including Python

Installing Python

- Open command prompt typing cmd
- Type *python* in lowercase
- If you get Python prompt >>> in response then
  - python is installed correctly,
  - else you get an error message that python is not a recognized command

Installing Python

- Download Python from *https://python.org*
- Click on Add Python 3.11 to PATH

Running Python

- Open a new command window and enter **python** in lowercase.
- You should see a Python prompt (>>>)

```
C:\> python
Python 3.x.x (main, Jun . . . , 13:29:14) [MSC
v.1932 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license"
for more information.
>>>
```

- Enter the following line

```
>>> print("Hello Python interpreter!")
Hello Python interpreter!
>>>
```

- You can download an installer for VS Code at *https://code.visualstudio.com*