# GSET - Introduction to Computer Programming with Python

Tristan Hill

Tennessee Technological University

Summer 2024

#### Module 1 - Creating a Program



#### Module 1 - Creating a Program

- Learning to Program
- Choosing a Language
- Compiling and Linking Source
- Up Next ...

## Learning to Program

Programming is a skill that requires a lifetime of learning, and now is a great time to start.

- New Problems
- New Languages
- New Hardware

# Learning to Program

Why is computer programming useful?

- •
- •

How do you become a computer programmer?

- •
- •
- 0

## Choosing a Language

Question: How many programming languages exist today?

- ► A.NET
- ► A-0 System
  - ...
- ▶ B
- Bash

- ► Fortran
- **▶** C
- **▶** C−
- ► C++ ...
- Python

- Java
- ▶ JavaScript
- ► MATLAB
- ► Tex ...

Answer:

## Choosing a Language

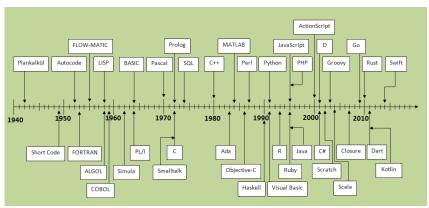


Image: Java Concept Of The Day

# Choosing a Language

Modern Programming Languages

- C++
- Python
- JavaScript

Why is Python important for scientists and engineers?

- •
- •
- •

# Compiling and Linking Source

How does the computer run your code?

Compiled	Interpreted

# Compiling and Linking Source

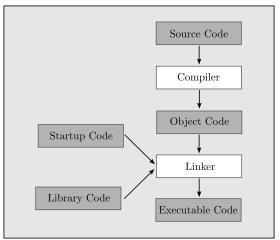


Image: T.Hill from C++ Primer Plus by Stephen Prata

Learning to Program Choosing a Language Compiling and Linking Source Compiling and Linking Source Up Next ...

#### Up Next ...

► **Next:** We are going to learn about Variables, Expressions and Assignment.