

# GSET - Programming with Mr. Hill

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## Module 1 - Creating a Program

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- Learning to Program
- Choosing a Language
- C++ Program Structure
- 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



# 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

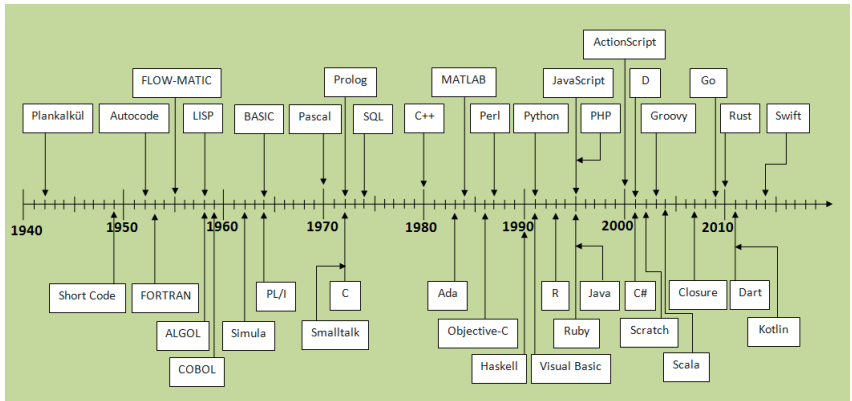


Image: [Java Concept Of The Day](#)

# Choosing a Language

## Modern Programming Languages

- C++
- Python
- JavaScript

Why is C++ important for scientists and engineers?

- 
- 
-

# C++ Program Structure

Look at the program from the previous tutorial.

---

```
/*  
Hello World - June 3, 2021  
This is a comment  
*/  
  
#include <stdio.h>  
  
int main()  
{  
    printf("Hello World");  
  
    return 0;  
}
```



# Compiling and Linking Source

How does the computer run your code?

Compiled	Interpreted

# Compiling and Linking Source

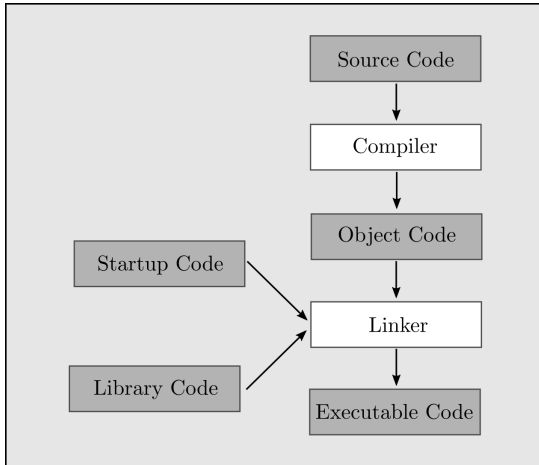


Image: T.Hill from C++ Primer Plus by Stephen Prata

## Up Next ...

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