

C Programming Introduction

Rev 1.1

Overview:

In this activity, you will review resources discussing the history and the value of C Language programming. You'll look current rankings of software languages to see how C compares to others. The instructor will take this opportunity to discuss other languages and how they relate. Finally, you'll get a first look at C code using an online tool replit.

Prerequisites:

Prior to beginning the instruction provided in this lesson you must have completed the following:

1. Course Introduction

Performance Outcomes:

1. Identify several attributes of C Language programming that make it popular.
2. Describe how the basics of coding in C differ from that of a scripting language like Python.
3. Recognize C source code.

Resources:

1. [Purpose of Programming](#)
2. [Why Learn the C programming Language?](#)
3. [C Programming/History](#)
4. [TIOBE Index](#)
5. [Hot50 Statewide 2030.pdf \(milmi.org\)](#)
6. [CareerOutlook Statewide 2030.pdf \(milmi.org\)](#)
7. [Stack Overflow Developer Survey 2023](#)
8. [Replit.com](#)

Materials:

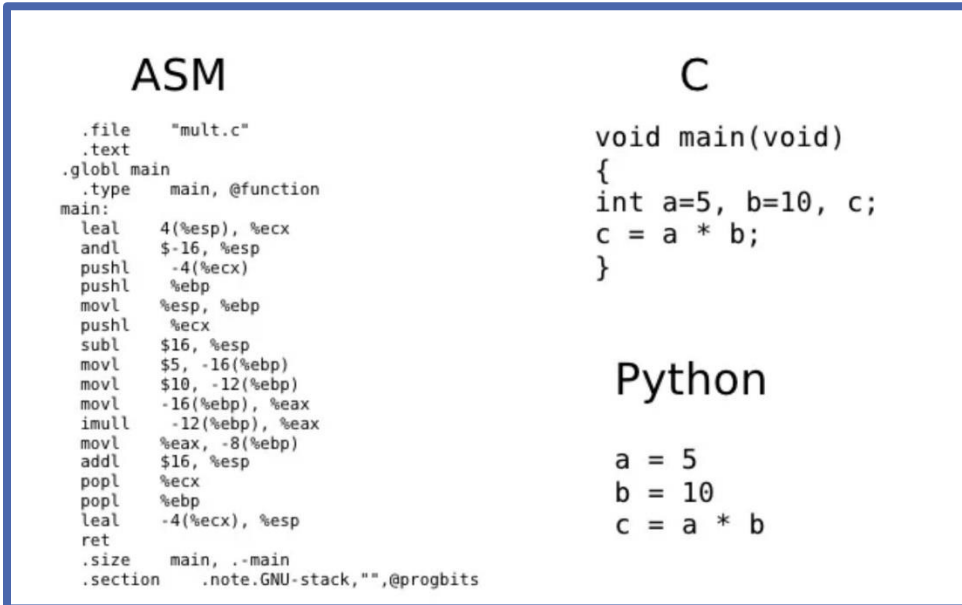
1. None

Directions:

1. The instructor will use the resources above to discuss the process of computer programming and the choice of languages. Students will be able to describe and compare the very basics of the following languages.

EGR111 – Introduction to Computer Science (C Language)

- a. Machine
- b. Assembly
- c. C
- d. C++
- e. C# and Java
- f. Python



2. The [TIOBE Index](#) provides current ranking of the C Language compared to other languages. The instructor will discuss factors that drive the selection of a computer language.
 - a. As an outcome, you should be able to identify each of the languages listed in step 1 and provide a basic description along with a comparison to others listed.
 - b.
3. The class will view results from the [Stack Overflow Developer Survey](#) looking specifically at technologies, AI, and work.
4. Finally, we'll take a look at the [Michigan's Hot 50 Job Outlook](#) to see wage and growth detail associated with software development.
5. Use the Replit.com tool to get a first look at a C program. The instructor will guide you through some basic editing of the code and discuss the interface and its relationship to the Visual Studio Code IDE.

Assessments:

See week 01 worksheet.