

What is programming?

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Abstract

This article is intended to answer (very briefly) to a question: *What is a programming?* Although computer programs nowadays are pretty ubiquitous in nature, they remain being *black boxes of magic* for most people, even tech-savvy ones.

However, being a *black box of magic* to some extent is a requirement for some commercial software (especially when there are trade secrets involved) natural. But this article is not intended to answer how every software works in details, but *how every software works, in general*.

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1 Introduction

Basically, *everything* you do on a computer is running some program. Everything, no matter what you do is a result of executing and working with some program. Your OS¹ *is a program*. Your internet browser is a program. Your media player, file explorer, video game, media editing software, office software *are programs*. *Everything that allows you to interact² with computer (and not just bare metal) is a program*.

So, essentially, *what is a program?*. According to Marriam-Webster definition³ (applicable for us), we can use following as a definition:

program is a sequence of coded instructions that can be inserted into a mechanism (such as a computer)

The gist of it being – *sequence of instructions*. So every interaction we can possibly have with a computer is somehow just a set of instructions. But *how computers do understand out instructions?* If I just shout into the microphone some command, computer will not just do as I say⁴. The same effect will have some instruction that I carefully write them in some text document, using Microsoft Word, for example.

How do I make computer to understand what I want from it? To understand this, *we must first understand what is a computer*.

2 What is Computer?

¹Operation System - Windows, Linux-based, MacOS, Android, iOS etc.

²Interaction with a computer here and on will not take physical interaction with a bare metal in account

³<https://www.merriam-webster.com/dictionary/program>

⁴Provided, there is no running program, responsible for such behavior