Binary Numbering System

Introduction

1 min

As the old joke goes:

There are only 10 types of people in the world, those that understand

Preview: Docs Binary is a number system of 1s and 0s which serves as a textual representation method for giving instructions to a computers CPU. In computing and telecommunications, binary codes are used for various methods of encoding data such as turning the character strings of source code, into bit strings or instruction sets for the CPU to execute.

binary

and those that don't.

By the time this lesson is over, you'll be able to count yourself amongst the ones that do!

To get started, binary information is defined as *relating to, composed of, or involving two things.*

What we, as computer scientists, understand as examples of binary can be broken into two distinct categories:

1. Binary Numbers

2. Binary Data

Binary numbers are expressed as a combination of 0s and 1s. For example, 100110 is the binary equivalent of the number 38.

Common examples of binary data include:

- Preview: Docs Machine code (also known as machine language or native code) is a low level programming language in the form of hexadecimal or binary instructions that execute computer programs on the computers CPU.

Machine Code

(0010101011001110010100100111)

- Preview: Docs Represents the logical values of true and false.

Boolean

Expressions (True or False)

- Hardware states (On or Off)

- Networking and File Storage

Before we start getting too far into how we use the data though, let's take some time to really understand what binary data and the binary numbering system are.

Instructions

Click next to go to the next exercise.