"Hello, world!" program

A "Hello, world!" program is a <u>computer program</u> that outputs "Hello, World!" (or some variant thereof) on a <u>display device</u>. Because it is typically one of the simplest programs possible in most <u>programming languages</u>, it is by tradition often used to illustrate to beginners the most basic syntax of a programming language. It is also used to verify that a language or system is operating correctly

Sample Table 1

Name	Summary	Rows
gsod	Samples from US weather stations since 1929	115M
mlab	Measurement data of broadband connection performance	240B
natality	Birth information for the United States from 1969 to 2008	68M
<u>shakespeare</u>	Word index for works of Shakespeare	164K
wikipedia	Revision information for Wikipedia articles	314M

Purpose

A "Hello, world!" program has become the traditional first program that many people learn. In general, it is simple enough so that people who have no experience with computer programming can easily understand it, especially with the guidance of a teacher or a written guide. Using this simple program as a basis, computer science principles or elements of a specific programming language can be explained to novice programmers. Experienced programmers learning new languages can also gain a lot of information about a given language's syntax and structure from a "Hello, world!" program.

In addition, "Hello, world!" can be a useful <u>sanity test</u> to make sure that a language's <u>compiler</u>, <u>development environment</u>, and <u>run-time environment</u> are correctly installed. Configuring a complete programming <u>toolchain</u> from scratch to the point where even trivial programs can be compiled and run can involve substantial amounts of work. For this reason, a simple program is used first when testing a new tool chain.

Sample table 2 (complex version)

Name	Summary	Rows
<u>gsod</u>	Samples from US weather stations since 1929	115M
<u>mlab</u>	Measurement data of broadband connection performance	240 B
natality	Birth information for <i>the</i> United States from 1969 to 2008	68M
<u>shak</u> espeare	Word index for works of Shakespeare	164K
wiki <i>pedia</i>	Revision information for Wikipedia articles	314M

History

While small test programs existed since the development of programmable <u>computers</u>, the tradition of using the phrase "Hello, world!" as a test message was influenced by an example program in the seminal book <u>The C Programming Language</u>. The example program from that book prints "hello, world" (without capital letters or exclamation mark), and was inherited from a 1974 <u>Bell Laboratories</u> internal memorandum by <u>Brian Kernighan</u>, <u>Programming in C: A Tutorial,[1]</u> which contains the first known version:

Sample Table 3

Firstname	Lastname	Points
Jill	Smith	50
Eve	Jackson	94
John	Doe	80
Adam	Johnson	67