Programming Languages

"Hello, World!"

"Hello, World!" is a small program that simply prints the message "Hello, World!" either in a terminal or console, or embedded within graphical user interfaces. Programmers tend to use it as a demonstration of the programming language's syntax, or to check their programming environment's configuration.

Activity

You will find below a list of "Hello, World!" programs. Try to find the programming language they are written in. Here is a list of candidate languages to help you (there are 4 intruders).

Assembler	JavaScript	Python	C#	Haskell
C	Java	Kotlin	Scala	Piet
C++	Unix Shell	ArnoldC	MATLAB	COBOL
Ada	Fortran	Standard ML	Dart	Pascal

1 –

```
#include <stdio.h>

int main() {
    printf("Hello, World!");
    return 0;
}
```

2 –

```
console.log("Hello, World!");
```

3 –

```
***************************
IDENTIFICATION DIVISION.
PROGRAM-ID. HELLO.
ENVIRONMENT DIVISION.
DATA DIVISION.
PROCEDURE DIVISION.
MAIN SECTION.
DISPLAY "Hello, World!"
STOP RUN.
***************************
```

4 –

```
fun hello() = print("Hello World!");

hello();
```

5 –

```
using System;

public class HelloWorld
{
    public static void Main()
    {
        Console.WriteLine("Hello, World!");
    }
}
```

6 –

```
program HelloWorld(output);

begin
  WriteLn('Hello, World!');
end.
```

7 –

```
package helloworld;


public class HelloWorld {
    public static void main( String args[] ) {
        System.out.println( "Hello, World!" );
    }
}
```

8 –

```
disp("Hello, World!");
```

9 –

```
global _start

section .text

_start:
  mov rax, 1      ; system call for write
  mov rdi, 1      ; file handle 1 is stdout
  mov rsi, msg    ; address of string to output
  mov rdx, len    ; number of bytes
  syscall         ; invoke operating system

  mov rax, 60     ; system call for exit
  mov rdi, 0      ; exit code 0
  syscall         ; invoke operating system to exit

section .data
  msg: db "Hello, World!", 10
  len: equ $ - msg
```

10 –

```
def hello():

    print("Hello, World!")

hello()
```

11 –

```
#include <iostream.h>

main()
{
    cout << "Hello, World!" << endl;
    return 0;
}
```

12 –

```
object Hello {

    def main(args: Array[String]) = {
        println("Hello, World!")
    }
}
```

13 –

```
void main() {

  print('Hello World!');
}
```

14 –

```
IT'S SHOWTIME

TALK TO THE HAND "Hello, World!"
YOU HAVE BEEN TERMINATED
```

15 –

```
with Text_IO;

procedure Hello_World is

begin
  Text_IO.Put_Line("Hello, World!");
end Hello_World;
```

16 –

```
      PROGRAM HELLO

      WRITE (*,100)
      STOP
100 FORMAT (' Hello, World! ' /)
      END
```