

# Clean code

1

```
# This is bad
```

```
c = 5
```

```
d = 12
```

```
# This is good
```

```
city_counter = 5
```

```
elapsed_time_in_days = 12
```

2

```
import random
```

```
# This is bad
```

```
def roll():
```

```
    return random.randint(0, 36) # what is 36 supposed to represent?
```

```
# This is good
```

```
ROULETTE_POCKET_COUNT = 36
```

```
def roll():
```

```
    return random.randint(0, ROULETTE_POCKET_COUNT)
```

3

```
# This is good
```

```
score_list = [12, 33, 14, 24]
```

```
word_dict = {
```

```
    'a': 'apple',
```

```
    'b': 'banana',
```

```
    'c': 'cherry',
```

```
}
```

4

```
# This is bad
```

```
fna = 'Bob'
```

```
cre_tmstp = 1621535852
```

```
# This is good
```

```
first_name = 'Bob'
```

```
creation_timestamp = 1621535852
```

1) Some languages that are considered to be compiled:

Ada  
ALGOL  
ALGOL 60  
ALGOL 68  
SMALL  
BASIC  
PowerBasic  
Visual Basic (to bytecode)  
PureBasic  
C  
C++  
C# (to bytecode)  
CLEO  
COBOL  
Cobra  
Crystal  
D  
eC  
Eiffel  
Sather  
Ubercode  
Erlang (to bytecode)  
F# (to bytecode)  
Factor (later versions)  
Forth  
Fortran  
Go  
Haskell  
Haxe (to bytecode or C++)  
Java (to bytecode)  
Clojure[2]  
Scala  
Kotlin  
JOVIAL  
Julia (through JIT)  
LabVIEW, G  
Lisp  
Common Lisp  
Mercury  
ML  
Standard ML  
Alice  
OCaml  
Nim (to C, C++, or Objective-C)  
Pascal

interpreted language generally refers to languages that are usually interpreted rather than compiled.

Ant

APL

AutoHotkey scripting language

AutoIt scripting language

BASIC (some dialects)

Programming Language for Business (PL/B, formerly DATABUS, later versions added optional compiling)

Eiffel (via Melting Ice Technology in EiffelStudio)

Emacs Lisp

FOCAL

GameMaker Language

Groovy

J

Julia (compiled on the fly to machine code, but a transpiler Julia2C exists)

JavaScript

Lisp (early versions, pre-1962, and some experimental ones; production Lisp systems are compilers, but many of them still provide an interpreter if needed)

LPC

Lua

MUMPS (an ANSI standard general-purpose language)

Maple

Mathematica

MATLAB

OCaml

Pascal (early implementations)

PCASTL

Perl

PHP

PostScript

PowerShell

PROSE

Python

Rexx

R

REBOL

Ring

Ruby

S-Lang

Speakeasy

Standard ML (SML)

Spin

Tcl

Tea

Open source lan

1.JavaScript

2.Python

3.PHP

4.Swift

5.R Programming

6.C++

7.Go

8.Kotlin

9.Scala

10.Ruby