

# Procedural Sequence of instructions that inform the computer what to do with the program's input

Examples
C
Pascal
Unix (sh)

## Object-Oriented Deal with collections of objects which maintain internal state and support methods that query or modify this internal state in some way.

Examples Java

Smalltalk

### Functional Decomposes into a set of functions, each of which solely takes inputs and produces outputs with no internal state.

## Examples Haskell OCaml ML

### Declarative Specification describes the problem to be solved, and language implementation figures out the details

Examples SQL Prolog

## Multi-Paradigm Supports several different paradigms, to be combined freely

Examples
Scala
C++
Python

### Programming Paradigms

#### **Procedural**

Sequence of instructions that inform the computer what to do with the program's input

#### Declarative

Specification describes the problem to be solved, and language implementation figures out the details

#### Examples

Pascal

Pascal Unix (sh)

#### Multi-Paradigm

Supports several different paradigms, to be combined freely

Examples

SQL Prolog

#### **Object-Oriented**

Deal with collections of objects which maintain internal state and support methods that query or modify this internal state in some way.

C++
Python

#### **Functional**

Examples composes into a set of functions, each of which solely solely and produces outputs with no internal state.

Examples Java Smalltalk

Examples Haskell OCaml ML

### Functional Programming Concepts