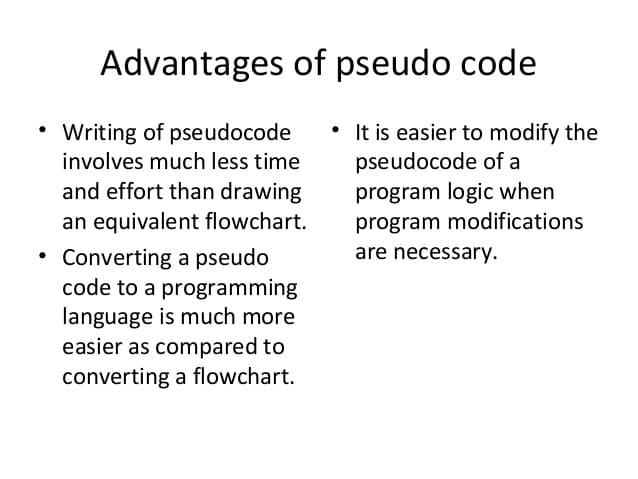
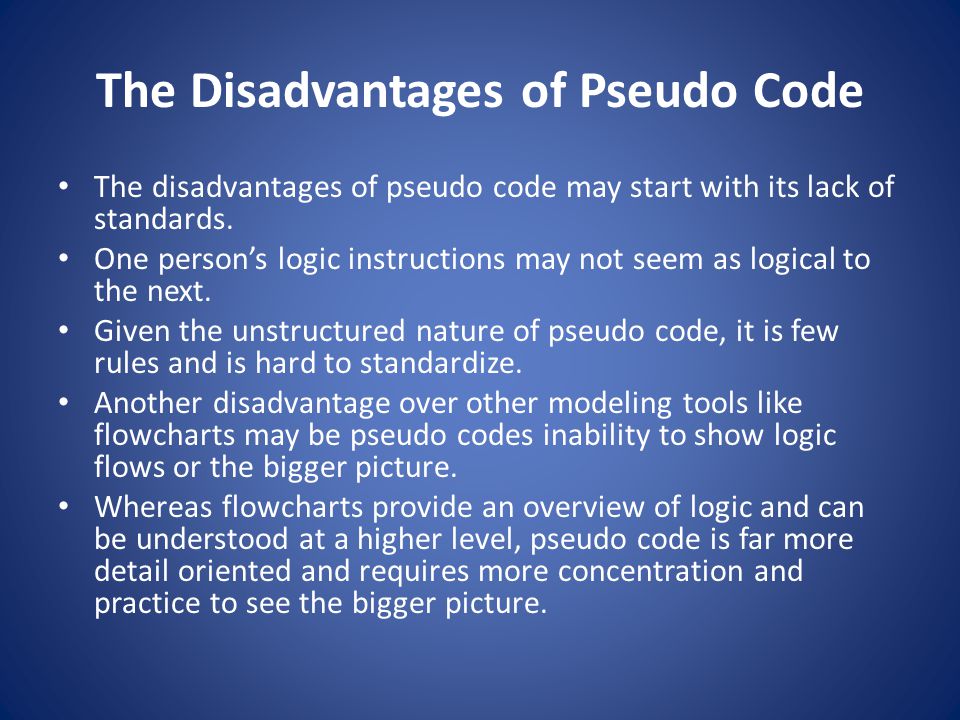
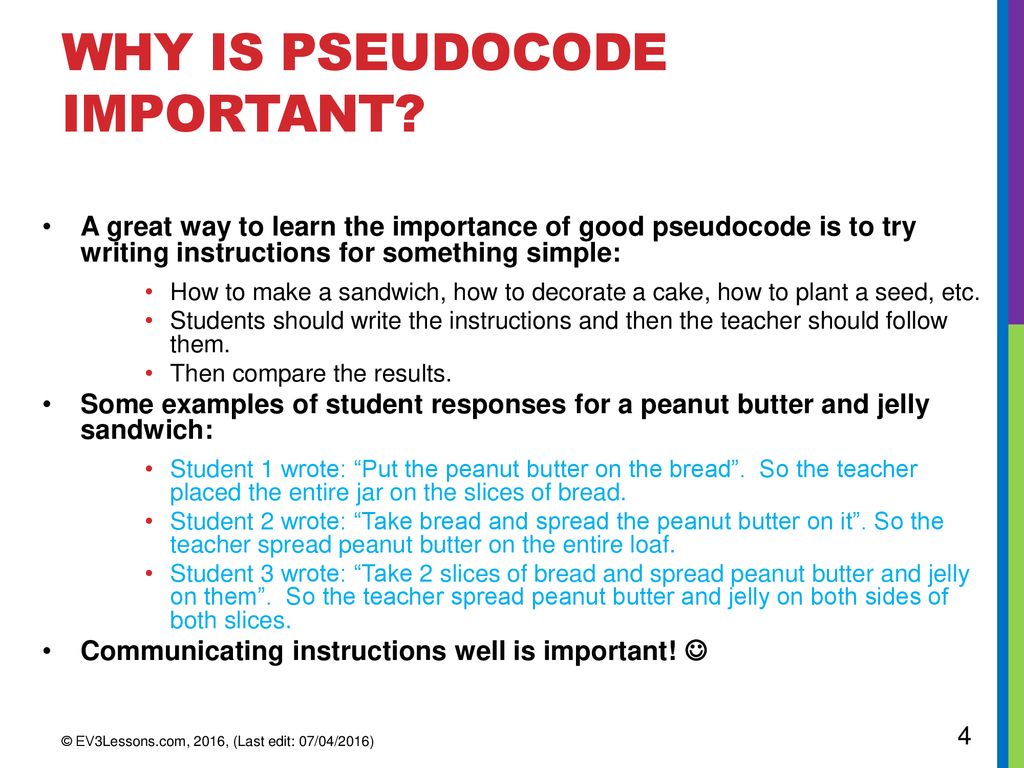
**Programming fundamentals**

**Pseudocode**

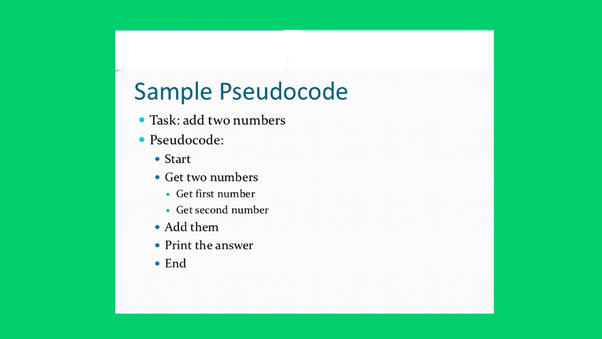
Pseudocode is an informal manner of explanation of programming which does not need a rigid syntax of language or technical aspects. It is used to create a contour or an approximate draught of a program. Pseudocode describes the flow of a program and excludes the underlying information. System designers generate pseudo code to ensure programmers comprehend and align code with the needs of a software project.

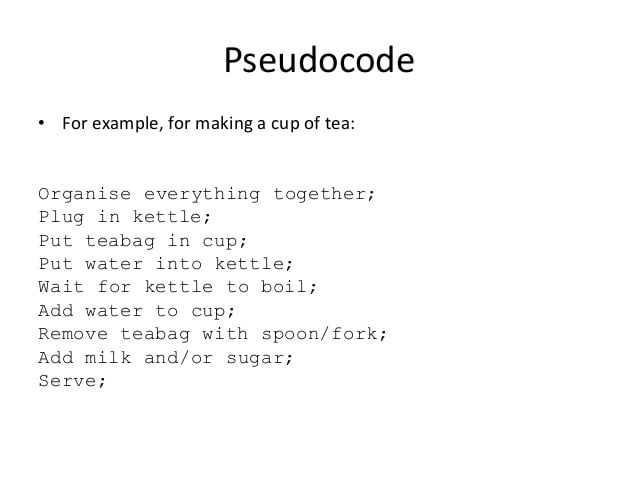






## How to write a Pseudocode?





**Algorithm basics**

How can I learn algorithm?

An **algorithm** is a finite list of instructions, most often used in solving problems or performing tasks.

**Wrap Up**

1. Have a good understanding of the basics.
2. Clearly understand what happens in an algorithm.
3. Work out the steps of an algorithm with examples.
4. Understand complexity analysis thoroughly.
5. Try to implement the algorithms on your own.
6. Keep note of important things so you can refer later.

**Algorithm:**

      Step 1: Start

      Step 2: Read a, b .        /\* a, b two numbers \*/

      Step 3: If a>b then        /\*Checking \*/

                      Display “a is the largest number”.

                  Otherwise

                      Display “b is the largest number”.

  Step 4: Stop.

### **JVM**

JVM (Java Virtual Machine) is an abstract machine. It is called a virtual machine because it doesn't physically exist. It is a specification that provides a runtime environment in which Java bytecode can be executed. It can also run those programs which are written in other languages and compiled to Java bytecode.

JVMs are available for many hardware and software platforms. JVM, JRE, and JDK are platform dependent because the configuration of each [OS](https://www.javatpoint.com/os-tutorial) is different from each other. However, Java is platform independent. There are three notions of the JVM: specification, implementation, and instance.

The JVM performs the following main tasks:

* Loads code
* Verifies code
* Executes code
* Provides runtime environment

### **JRE**

JRE is an acronym for Java Runtime Environment. It is also written as Java RTE. The Java Runtime Environment is a set of software tools which are used for developing Java applications. It is used to provide the runtime environment. It is the implementation of JVM. It physically exists. It contains a set of libraries + other files that JVM uses at runtime.

The implementation of JVM is also actively released by other companies besides Sun Micro Systems.



### **JDK**

JDK is an acronym for Java Development Kit. The Java Development Kit (JDK) is a software development environment which is used to develop Java applications and [applets](https://www.javatpoint.com/java-applet). It physically exists. It contains JRE + development tools.

JDK is an implementation of any one of the below given Java Platforms released by Oracle Corporation:

* Standard Edition Java Platform
* Enterprise Edition Java Platform
* Micro Edition Java Platform

The JDK contains a private Java Virtual Machine (JVM) and a few other resources such as an interpreter/loader (java), a compiler (javac), an archiver (jar), a documentation generator (Javadoc), etc. to complete the development of a Java Application.



