



# WHAT IS PROGRAMMING?

# IMPORTANT TERMINOLOGIES

**Program:** set of instructions/Block of code in order to achieve a task

**Syntax:** set of rules – `print("test")`

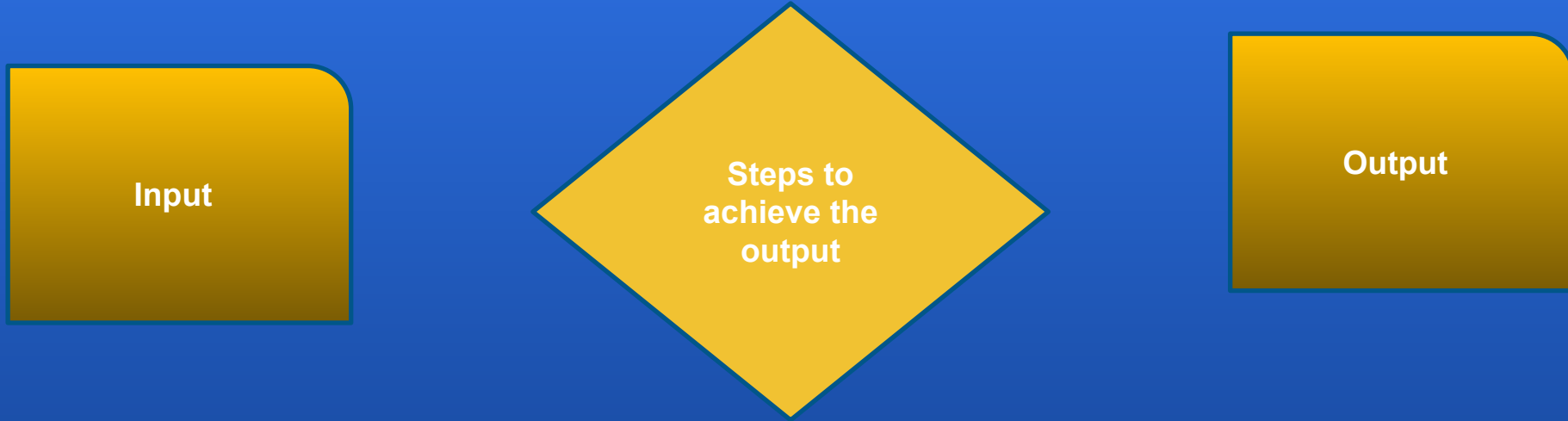
**Compiler:** a s/w program that translates human-readable source code into machine executable code . Detect syntax error.

**Interpreter:** a s/w program that directly executes and interprets source code line by line without prior compilation. Detect run-time error

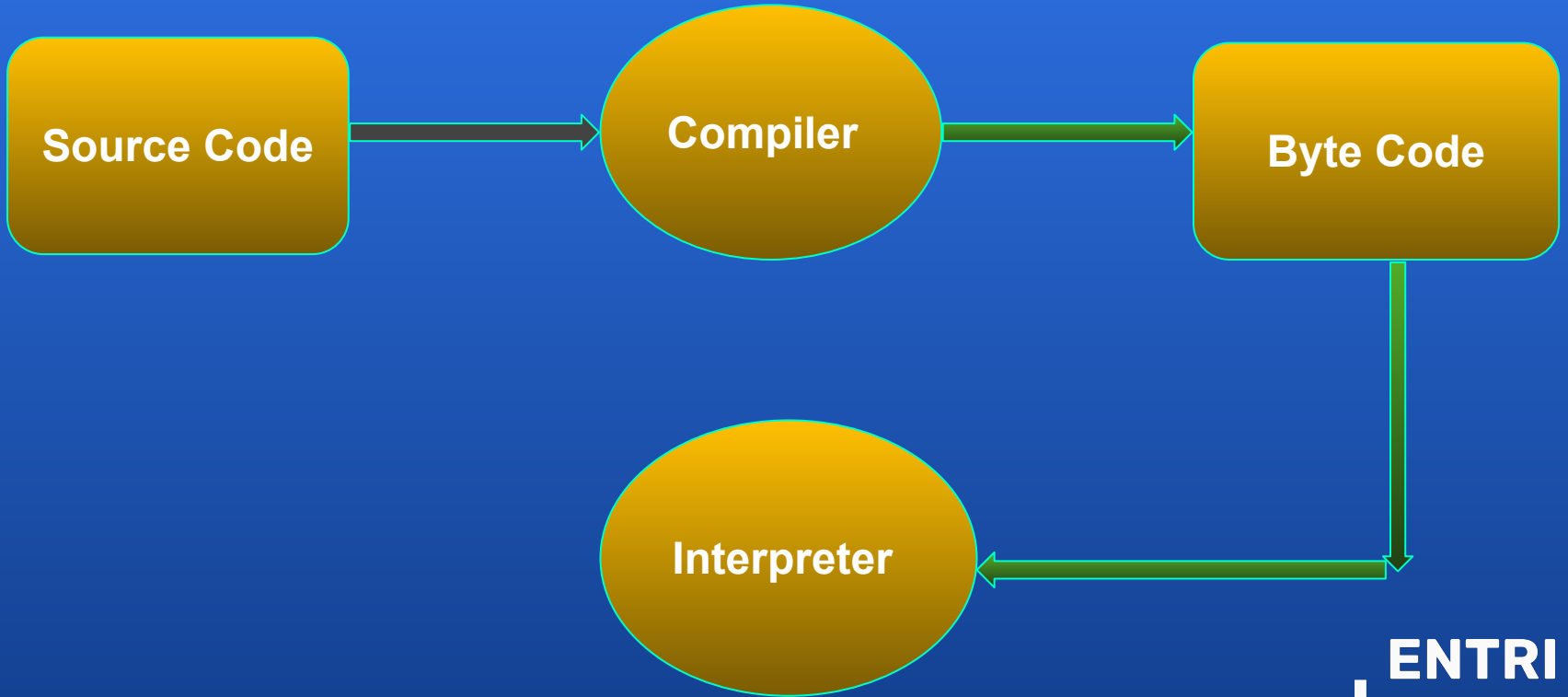
**Algorithm:** some steps

**Editor:** place to write the program

# Program Contains:



# JOURNEY OF CODE



MyProgram.java - Notepad

File Edit Format View Help

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

Source code is first written in plain text files ending with the .java extension.

MyProgram.class - Notepad

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```

Ep0% . - + + @ | | % * r r <init>, i()V, iCode,
LineNumberTable, main, r([Ljava/lang/String;)V,
SourceFile, MyProgram.java, * * | | r Hello, world, *
MyProgram, ijava/lang/Object, ijava/lang/System,
out, ijava/io/PrintStream, ijava/io/PrintStream,
println, i(Ljava/lang/String;)V ! | - r * @ r
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```

After the compilation is successful, java compiler will generate an intermediate ".class" file that contains the bytecode.

# Runtime error/Exceptions

Enter number 1:

Enter number 2:

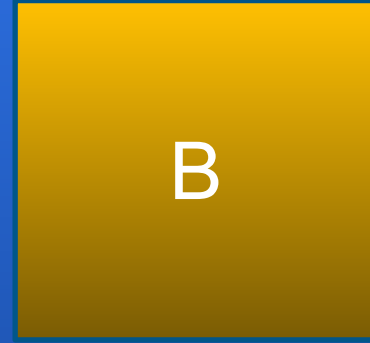
DIVIDE

Number 1: 10

Number 2:0

Divide=Number 1/ Number 2

# ALGORITHM: How to swap two numbers



# EDITORS



**Editor for java:** Eclipse, netbeans, intellij

**Editor for python:** IDLE, Jupyter, Pycharm(\*), Spyder,  
Google colab, online editors, coding room,

**Editor for C++:** Codeblocks, sublime text, turbo c++  
Dev C, Visual studio



# SOFTWARE DEVELOPMENT LIFECYCLE(SDLC)



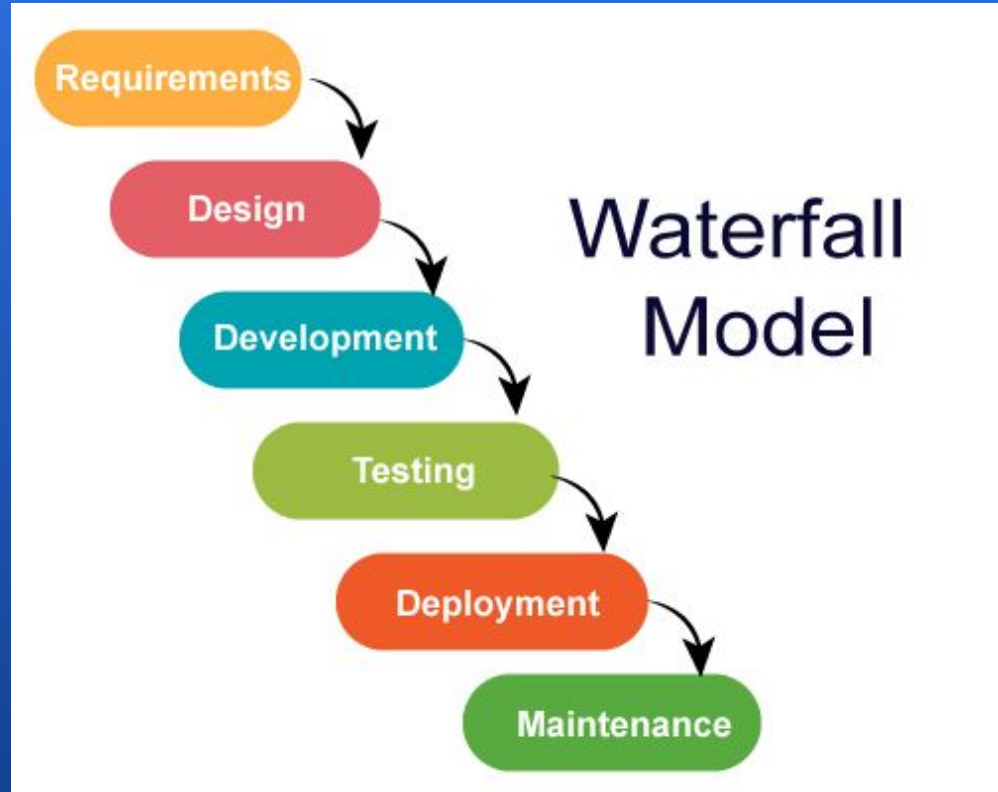
- is a process used by the software industry to design, develop and test high quality softwares.
- structured process that enables the production of high-quality, low-cost software, in the shortest possible production time.

# Steps in SDLC

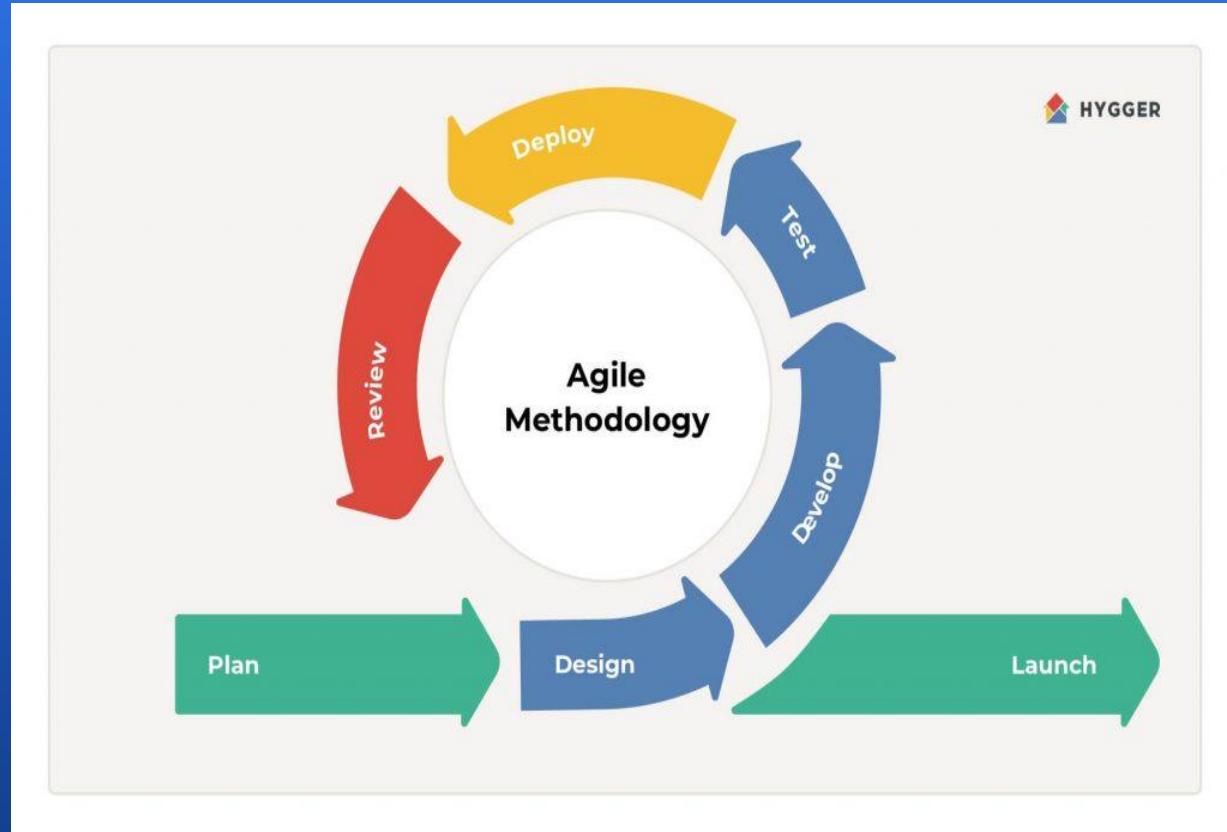


- Planning
- Analysis
- Design
- Coding
- Testing
- Deployment
- Maintenance

# WATERFALL MODEL



# AGILE MODEL





# THANK YOU

Welcome to IT Industry.

ENTRI  
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