### Programming Language used in my project

python and java

#### compilers used in python

Python Interpreter: An interpreter is typically used to run Python code. Line by line, the Python code is read by the interpreter, which then parses and runs it right away.

Bytecode Compilation: The Python interpreter first compiles the code into intermediate bytecode (.pyc files) when you run a Python script. The Python Virtual Machine (PVM) is used to execute this bytecode, which is independent of platform.

To execute the python code we use Jupyter notebook

steps to execute

Install the python in your local desktop and add environment variable of it

Then open command prompt by typing windows+R

If jupyter notebook is not installed

use command "pip install jupyternotebook"

If already installed

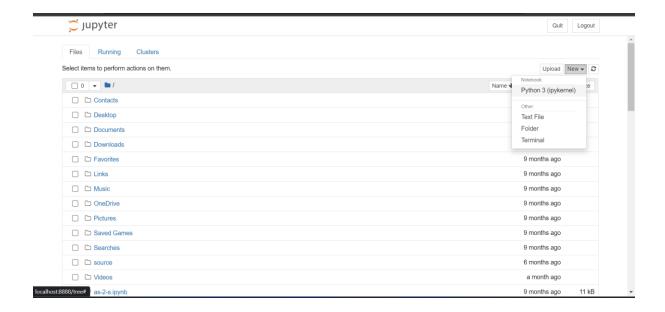
Type jupyter notebook a new webpage is opened

when the jupyternotebook is opened

#### Follow the steps

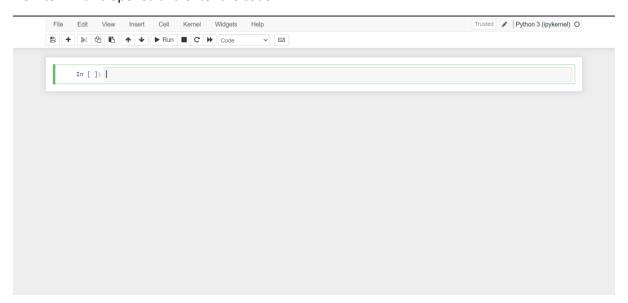


Click on drop down view of "NEW button"



# Select python 3(ipykernel)

New terminal is opened and enter the code



Click on run button

If no python is installed in computer you can use online python compiler

Then type the code and click on button run

## compilers used in java

In Java, the primary and most commonly used compiler is the Java Development Kit (JDK) compiler, which includes the javac compiler. Here are the main compilers and tools used in the Java ecosystem:

javac: The JDK comes with this standard Java compiler. It converts Java source code, found in.java files, into bytecode, found in.class files, which the Java Virtual Machine (JVM) can run.

The Java Development Kit (JDK) offers the Java compiler along with additional tools including the Java Runtime Environment (JRE), Java libraries, and utilities that are required for Java development.

Integrated Development Environments, or IDEs, include built-in or customized Java compilers that offer extra functionality, integrated debugging, and development tools. Examples of IDEs are Eclipse, IntelliJ IDEA, NetBeans, and others.

While javac is the standard Java compiler used to compile Java source code, there are alternative compilers and tools available, each with its own strengths and features. However, the majority of Java development is done using the javac compiler provided in the JDK.

# Steps to execute the java code

In google type the online java compiler(<a href="https://www.programiz.com/java-programming/online-compiler/">https://www.programiz.com/java-programming/online-compiler/</a>)

Type the code and hit run command

Or else you can use execute the code by

In plain text type the java code and save as .java file

Open the command prompt type the command

Javac filename.java -- To compile

Java filename – To execute