

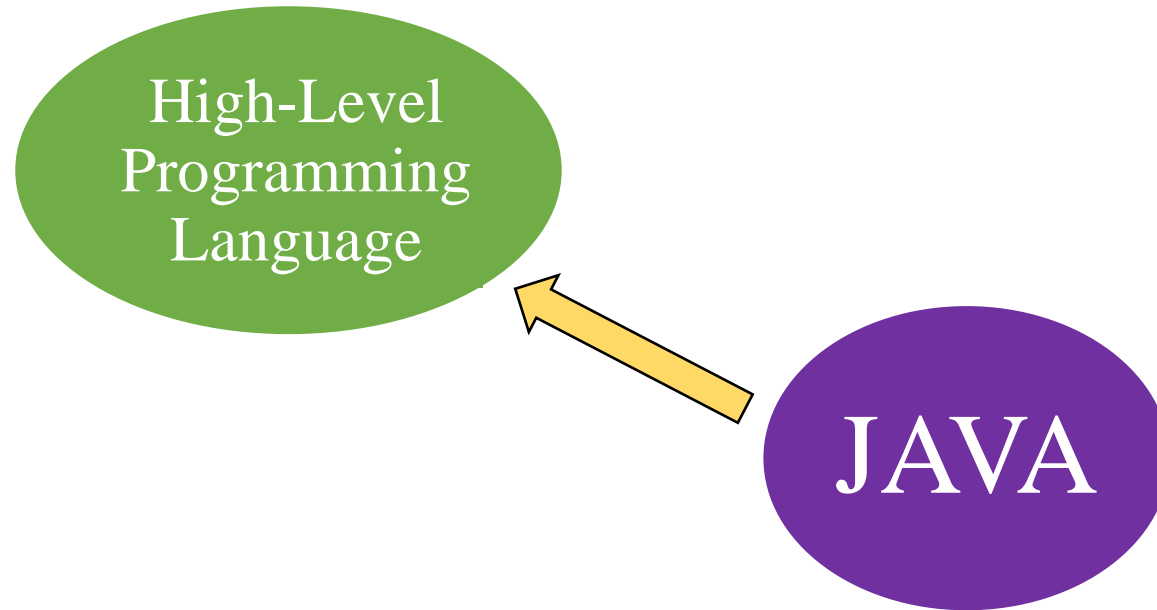


Sumeet Rathod

INTRODUCTION TO JAVA



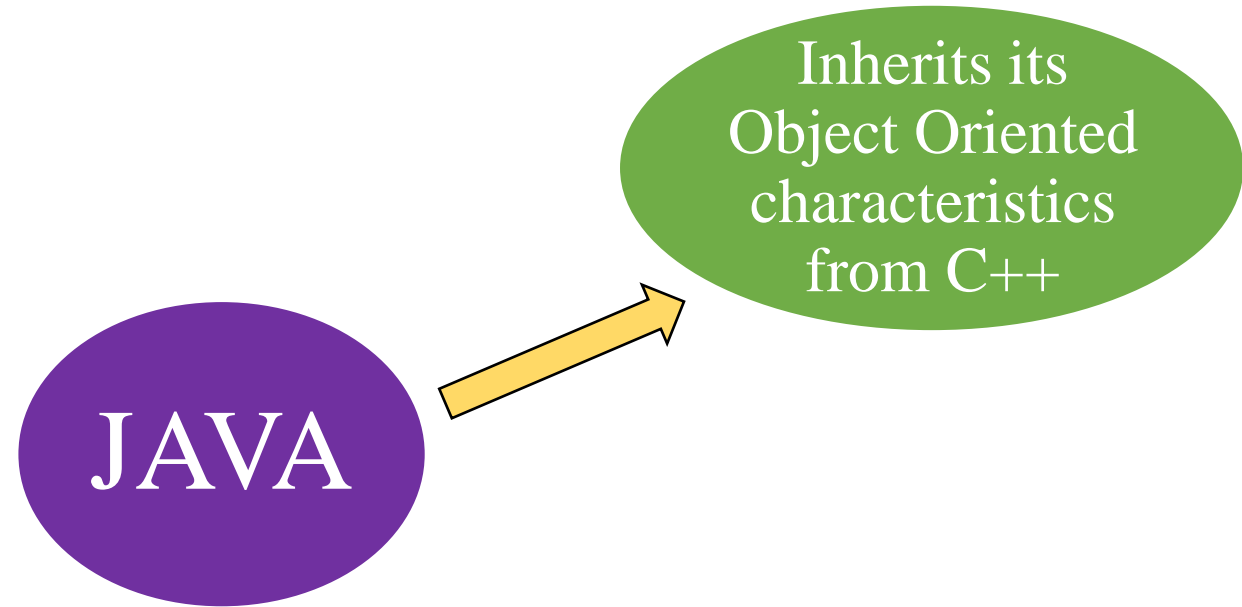
Introduction to Java



High level languages are written in a form that is human-readable, making it programmer friendly and enabling it to more focus on the problem solving. Due to its portable feature, it makes the programs machine-independent.



Introduction to Java



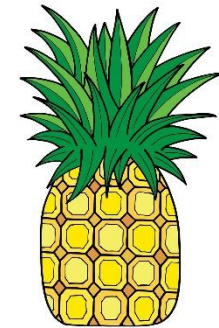
Fruits



Water



Orange



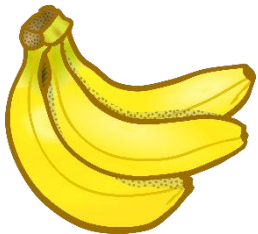
Pineapple



Milk



Strawberry



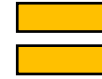
Banana



Milk



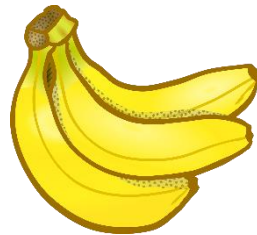
Strawberry



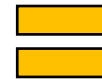
Strawberry Milkshake



Milk



Banana



Banana Milkshake



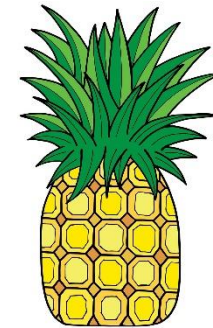
Fruits



Water



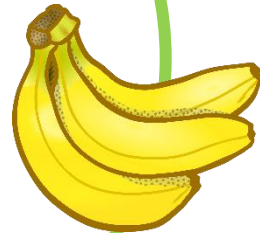
Orange



Pineapple



Milk



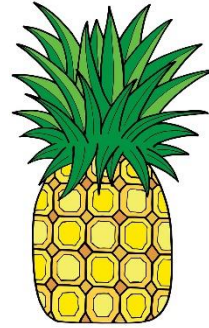
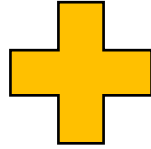
Banana



Strawberry



Water



Pineapple



Pineapple Juice



Water



Orange



Orange Juice



Fruits



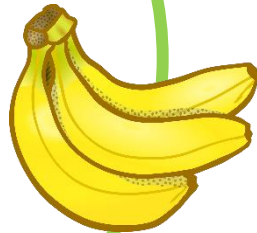
Milk



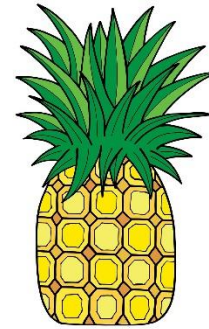
Water



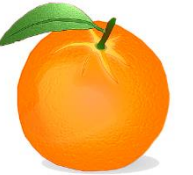
Strawberry



Banana



Pineapple



Orange



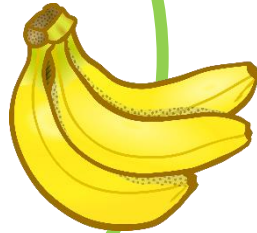
Fruits



Milk



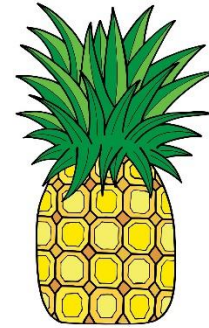
Strawberry



Banana



Milk



Pineapple

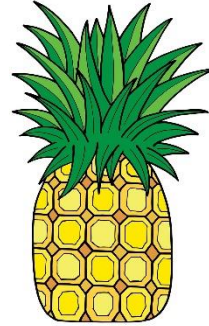
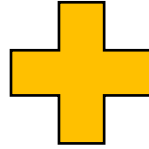


Orange

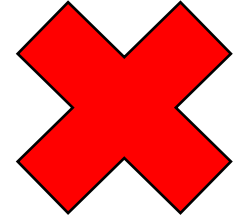
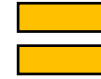




Milk



Pineapple



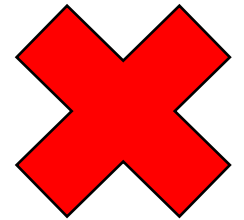
Pineapple Milkshake



Milk



Orange

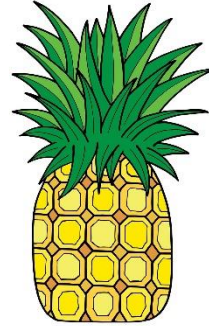
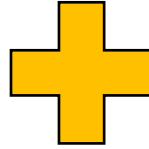


Orange Milkshake





Milk

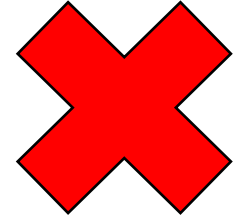


Pineapple

PROPERTY



Pineapple Milkshake



Milk

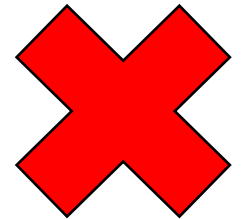


Orange

PROPERTY



Orange Milkshake



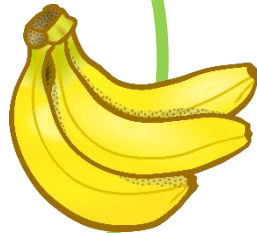
Fruits



Milk



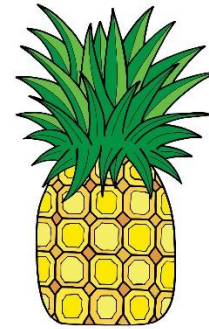
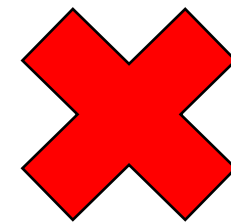
Strawberry



Banana



Milk



Pineapple



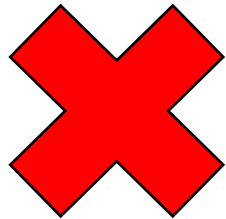
Orange



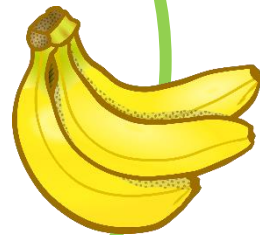
Fruits



Water



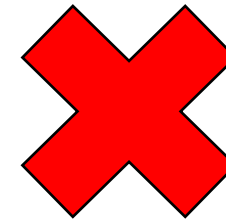
Strawberry



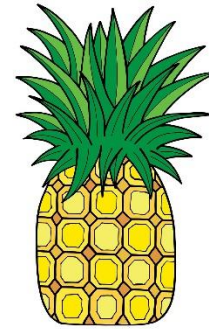
Banana



Milk



Pineapple



Orange



FUNCTION

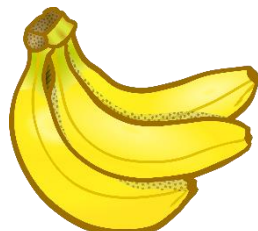


Milk

OBJECTS



Strawberry



Banana

CLASS



Fruits

PROPERTIES

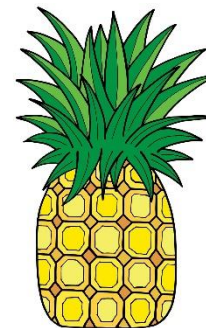
Object
Oriented

FUNCTION



Water

OBJECTS



Pineapple



Orange



Introduction to Java

“class” is a template that narrates the behavior of the supported object.

Object
Oriented



```
class Demo1
{
    Function1()
    {
        obj1;
    }
}
```



Introduction to Java

“Function” is a block of code that is called by a name, associated with an object.

Object
Oriented



```
class Demo1
```

```
{
```

```
    Function1()
```

```
{
```

```
    obj1;
```

```
}
```

```
}
```



Introduction to Java

Object
Oriented



```
class Demo1
{
    Function1()
    {
        obj1;
    }
}
```

“Object” have identity, state and behavior.



Introduction to Java

Object
Oriented

```
class Demo1
```

```
{
```

```
    Function1()
```

```
{
```

```
    obj1;
```

```
}
```

```
}
```



```
class Demo2
```

```
{
```

```
    Function2()
```

```
{
```

```
    obj2;
```

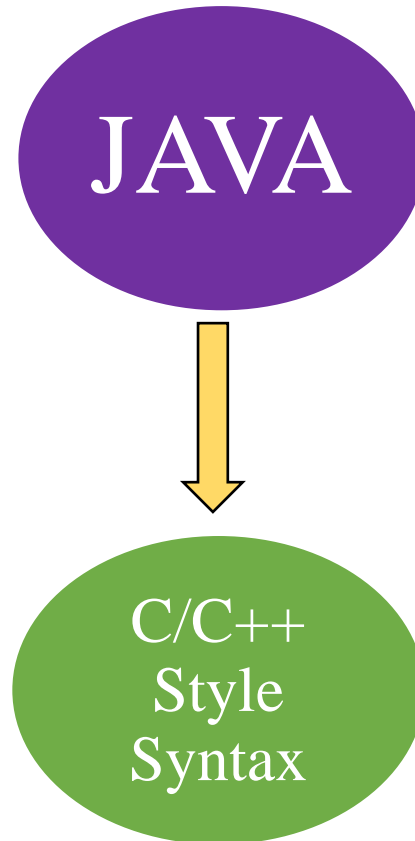
```
}
```

```
}
```

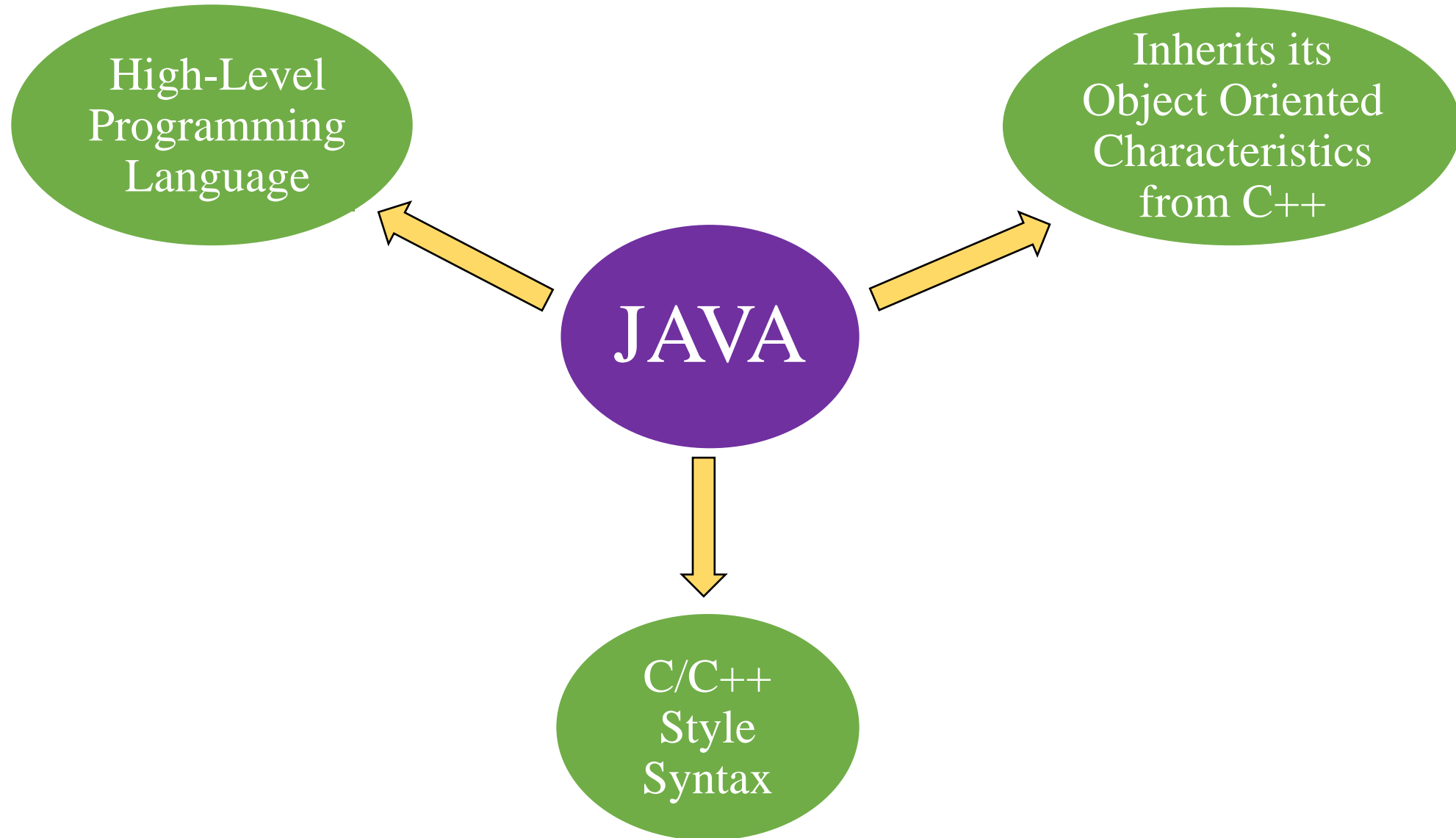


Introduction to Java

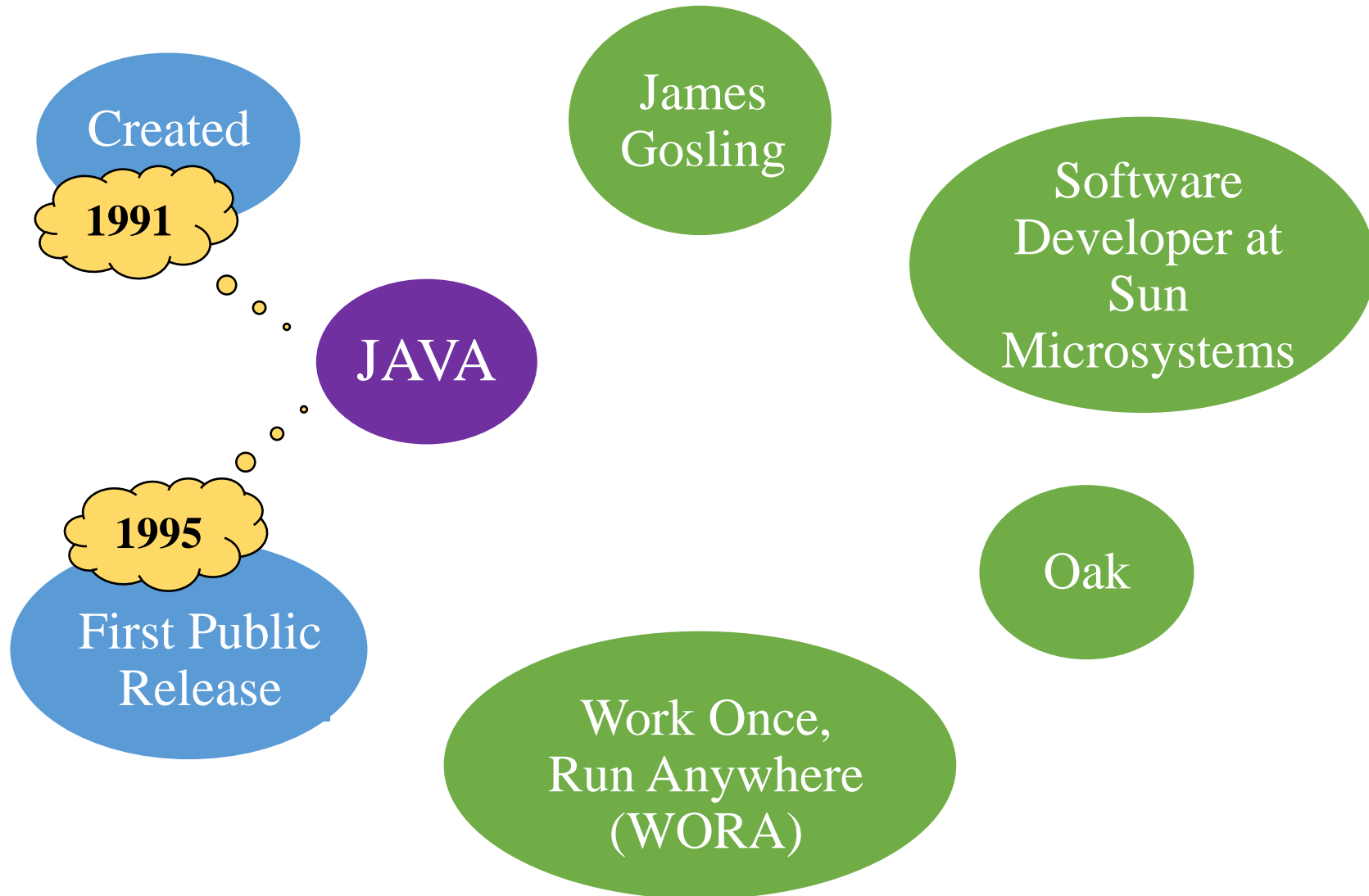
Java was designed based on C/C++ style syntax, as many programmers were familiar to it.



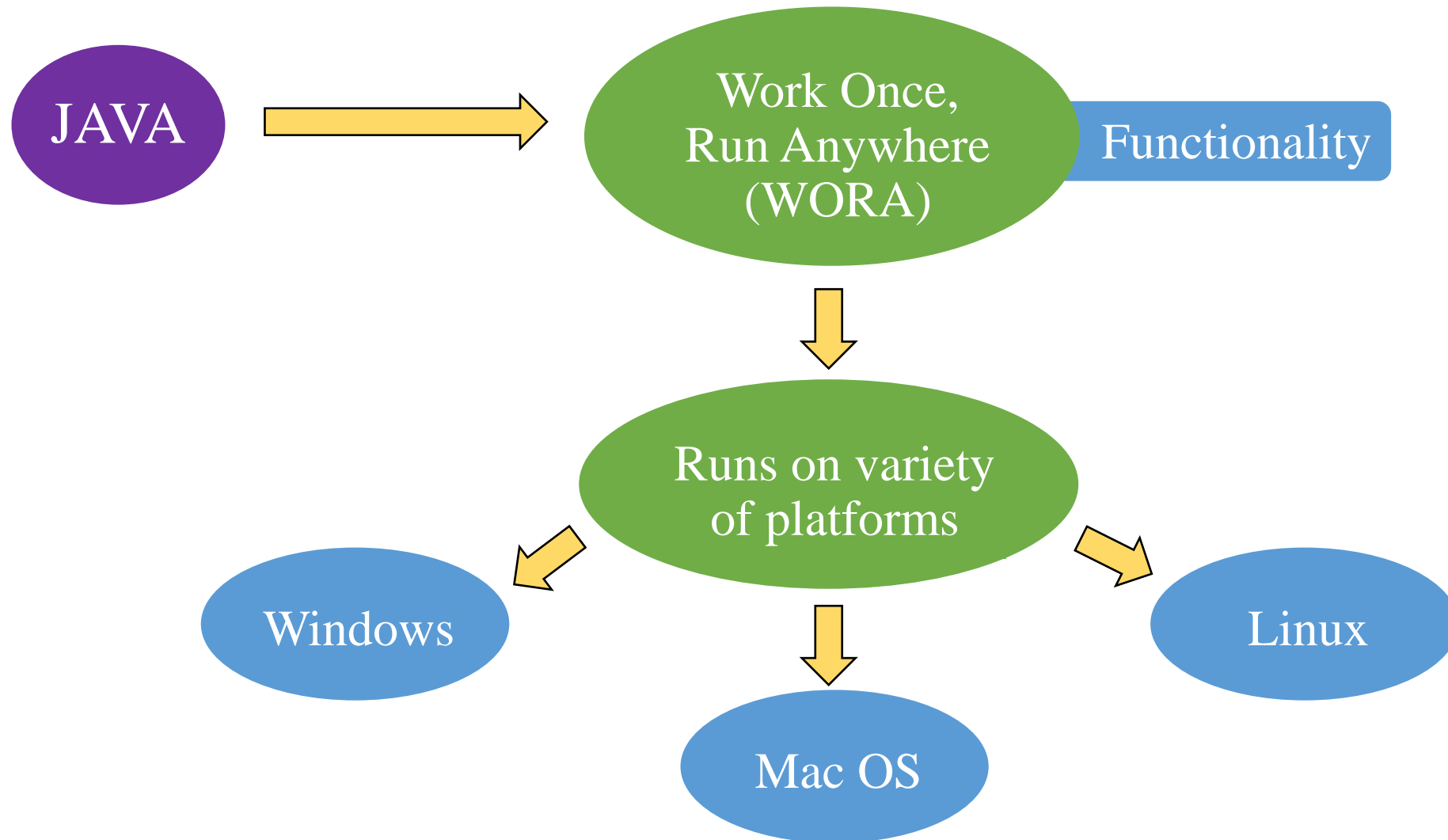
Introduction to Java



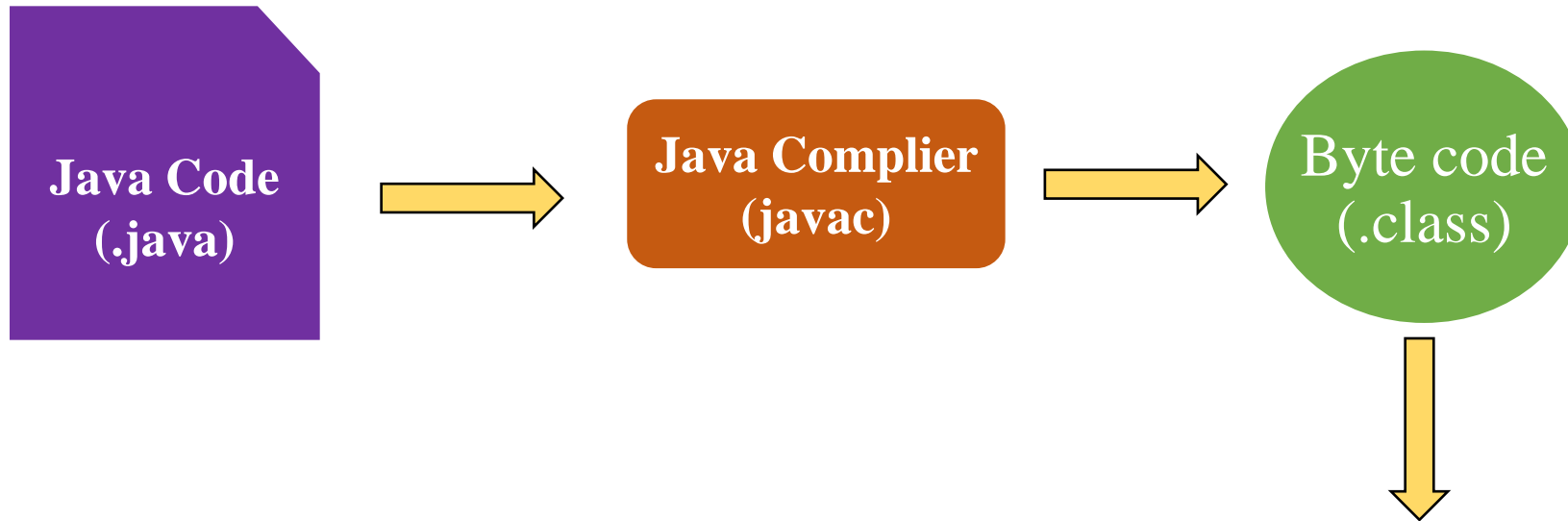
Introduction to Java



Introduction to Java



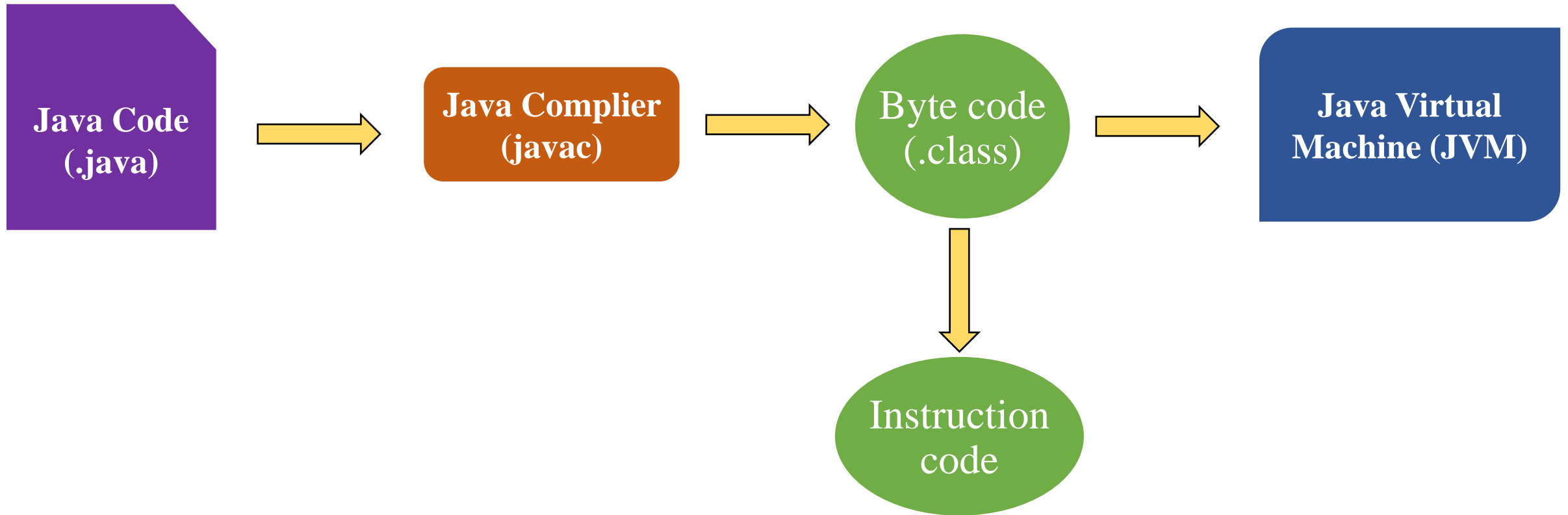
Introduction to Java



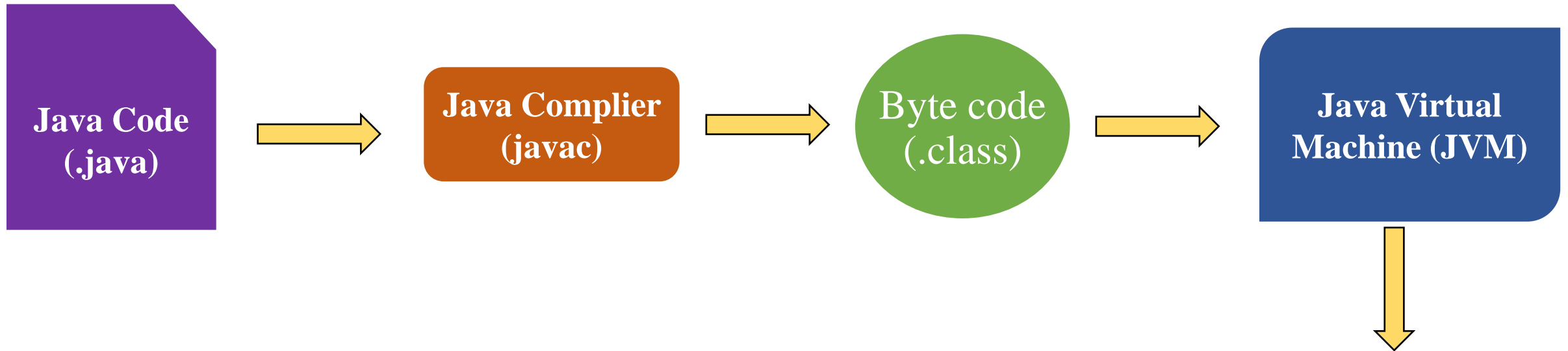
Java byte code is the instruction code that is processed by a Java Virtual Machine (JVM).



Introduction to Java



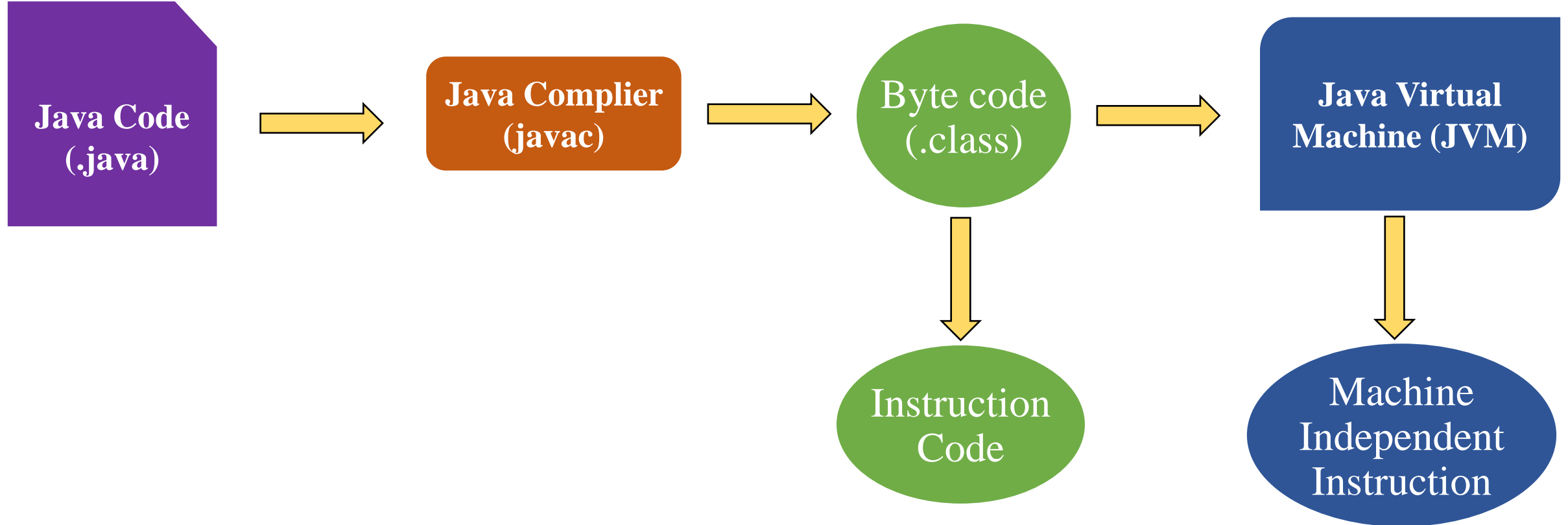
Introduction to Java



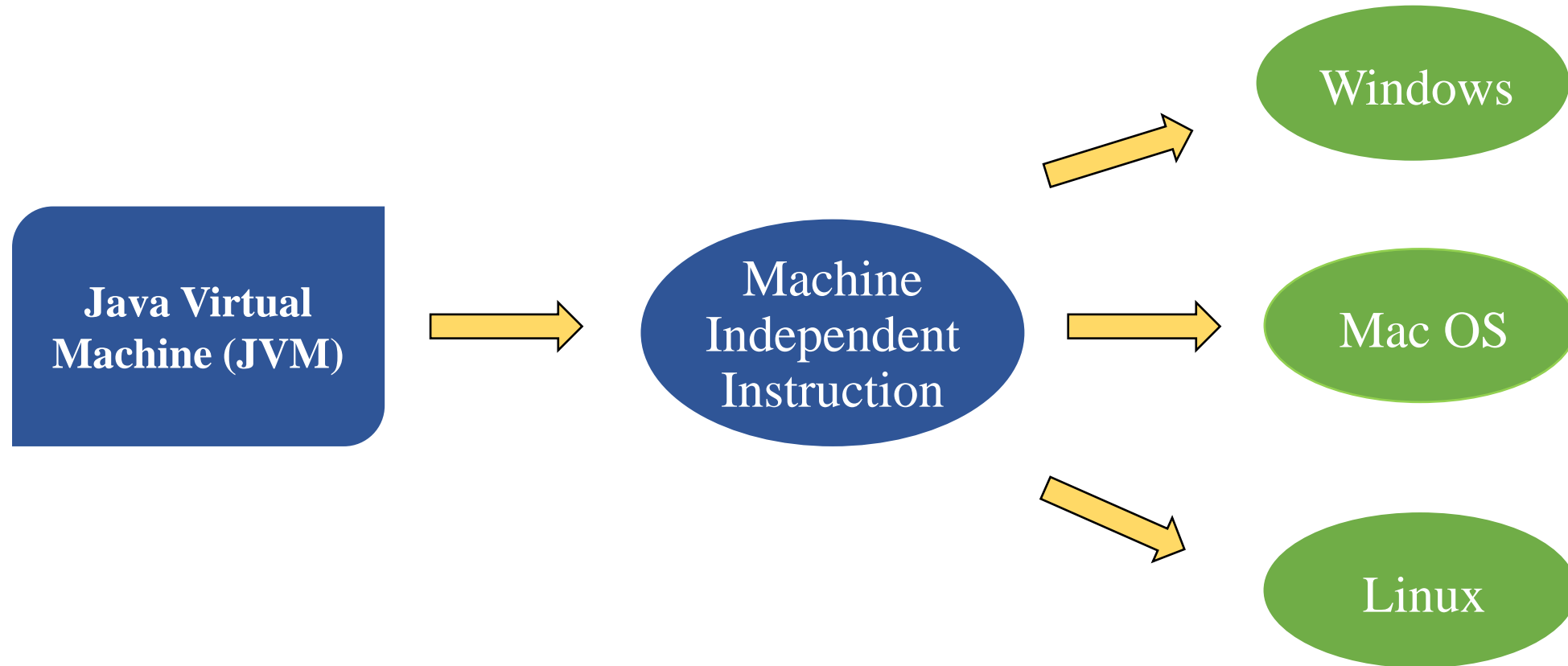
Java Virtual Machine (JVM) converts each instruction code into a machine independent instruction, which can run on any operating system.



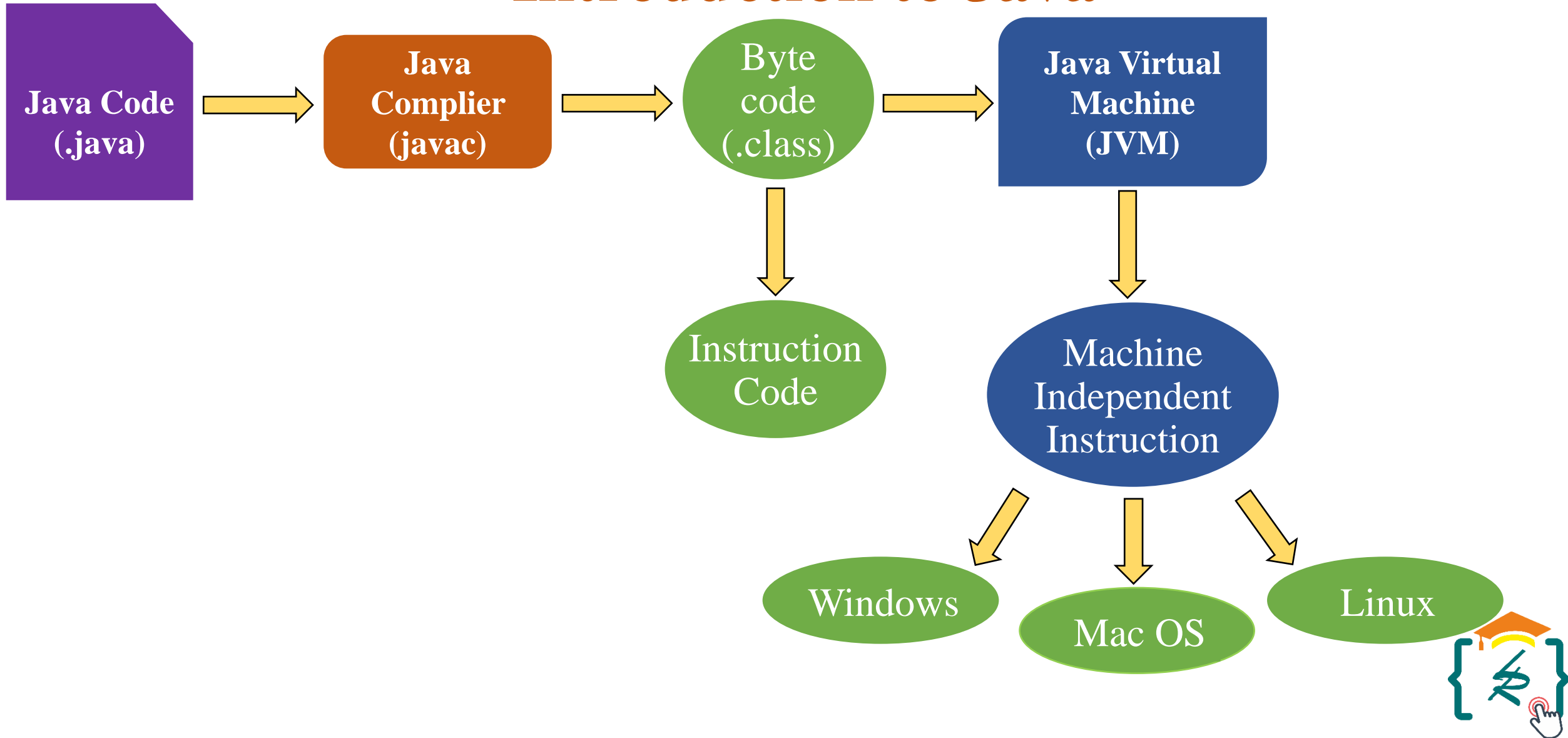
Introduction to Java



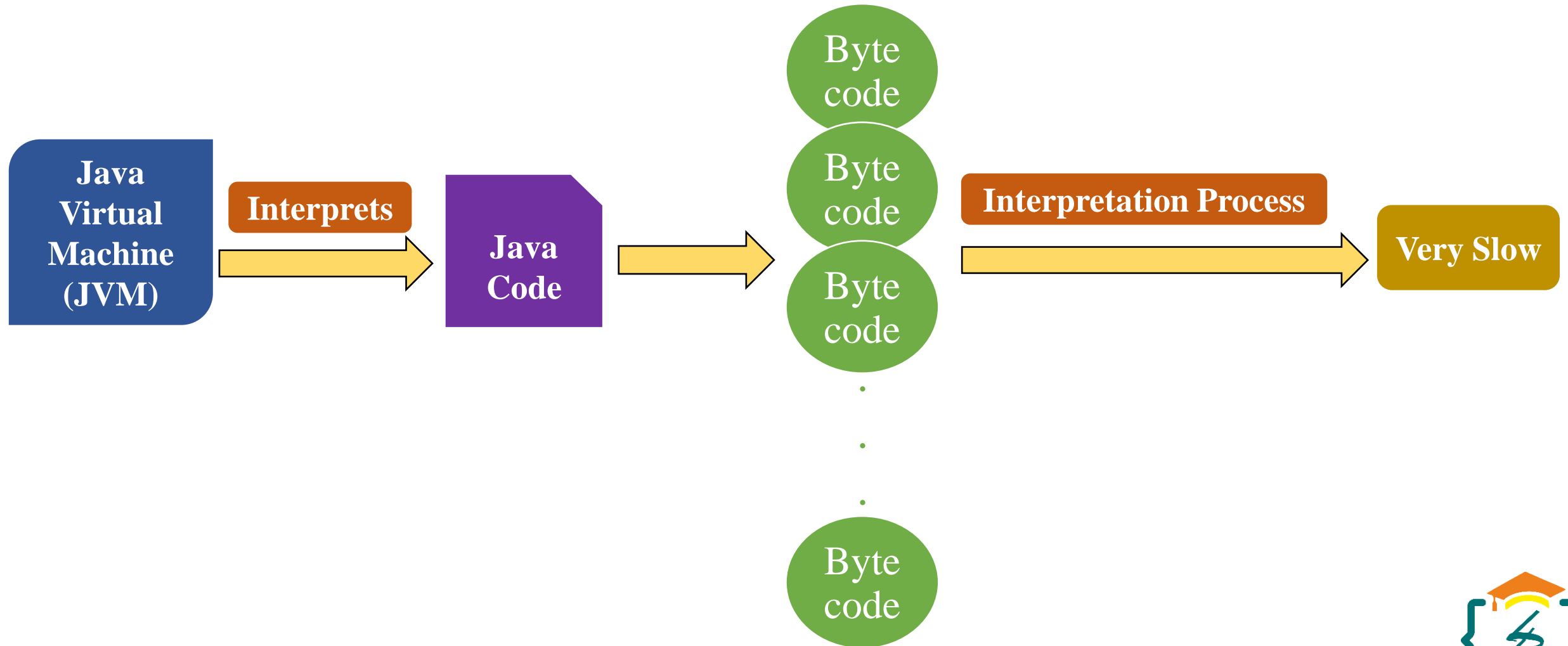
Introduction to Java



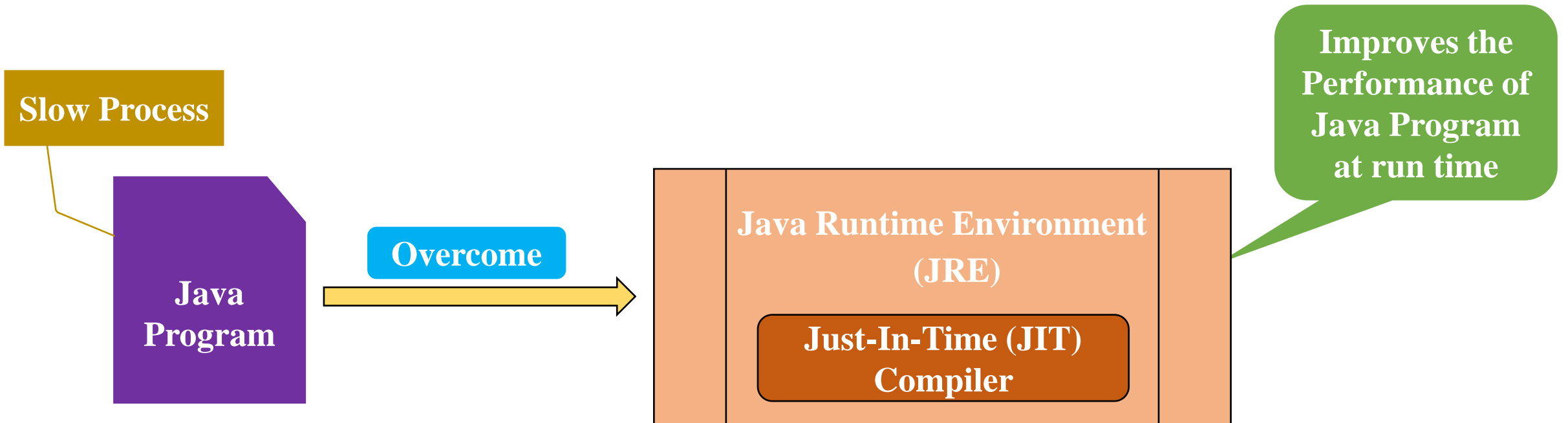
Introduction to Java



Introduction to Java



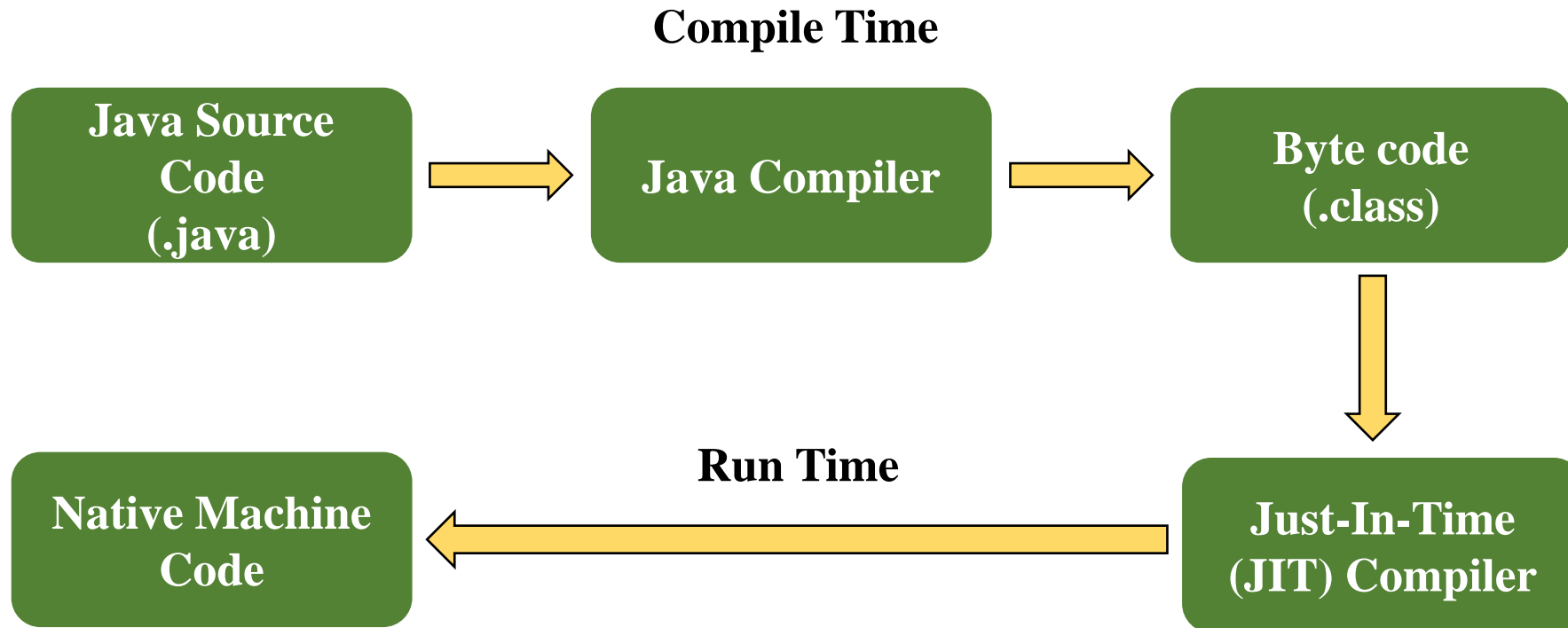
Introduction to Java



To overcome the slow process, Java introduced Just-In-Time (JIT) compiler, which is an integral component of the Java Runtime Environment (JRE) JIT compiler is responsible for improving the performance of Java applications at run time.



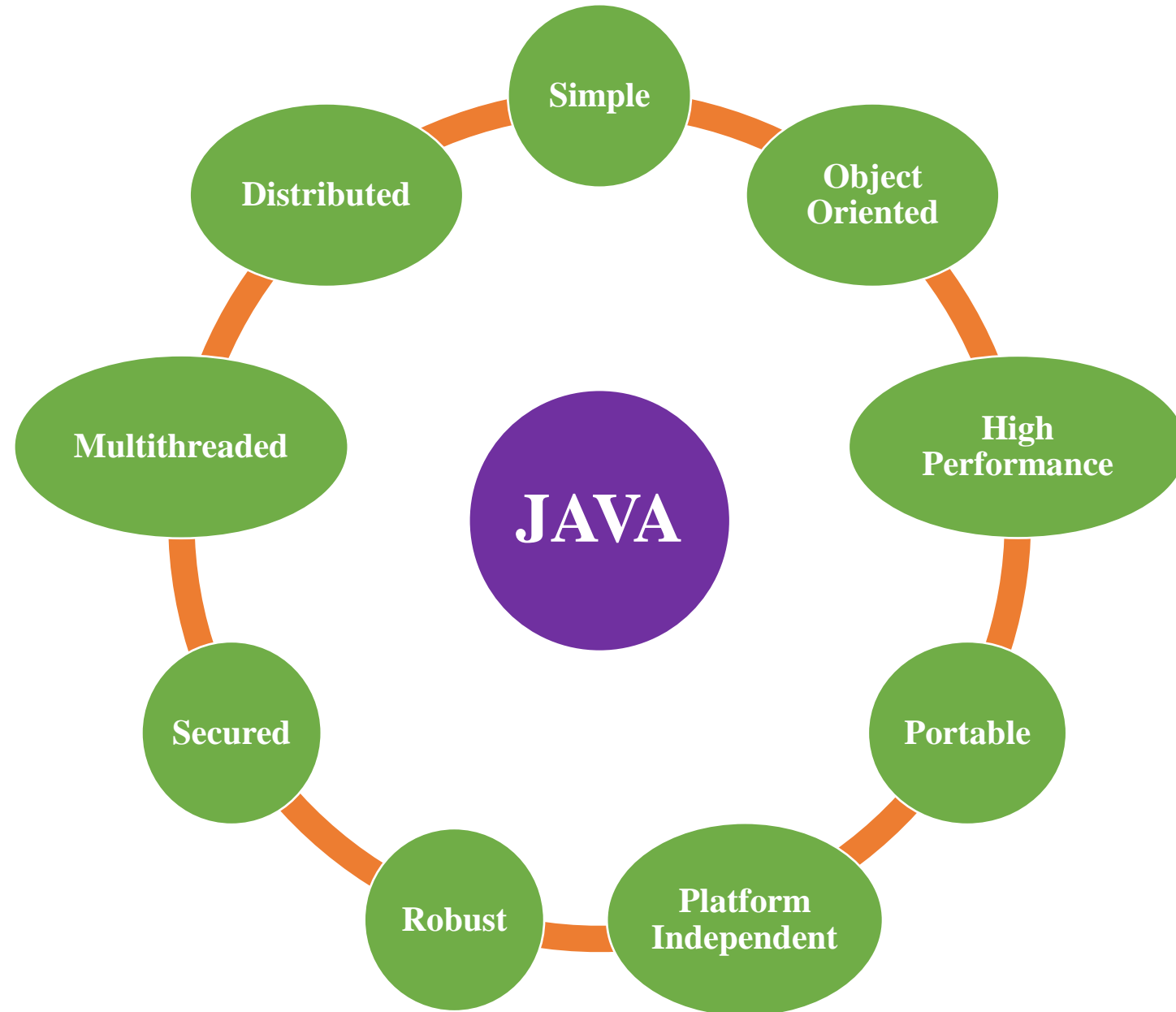
Introduction to Java



Compilation process of JRE



Features of Java



Features of Java

Simple

Java is very easy to learn programming language, as its syntax is very simple and clear in understanding.

Object Oriented

Java is an object-oriented programming language, where everything is an object, which has some data and behaviour.

High Performance

Java is faster as its code is compiled into byte code which is optimized by the Java compiler for Java Virtual Machine (JVM) to execute its applications faster with the help of Just-In-Time (JIT) compiler.



Features of Java

Portable

Java is portable as it provides the Java byte code to execute on any platform without any implementation.

Platform Independent

Java code is compiled into byte code format, which does not bound it to any specific operating system.

Robust

With features like strong memory management, automatic garbage collection and mechanism like exception handling makes Java a robust language.



Features of Java

Secured

Java's secure features allow us to develop virus-free systems, as Java program runs in Java Runtime Environment (JRE) making it is more secure.

Multithreaded

Multithreading feature of Java makes it possible to write program that can perform many tasks simultaneously without occupying memory for each thread, instead it shares a common memory area, resulting in highly interactive and responsive applications.

Distributed

Java is a distributed language as it can create applications that can run over network, with the help of TCP/IP protocols used for communication.



Any Questions... ???





*Thank
You*

