# *JAVA Key Features…*

by,

**Name: Priyanshu Meher**

**Java Programming Intern(5th Jan Batch 2024)**

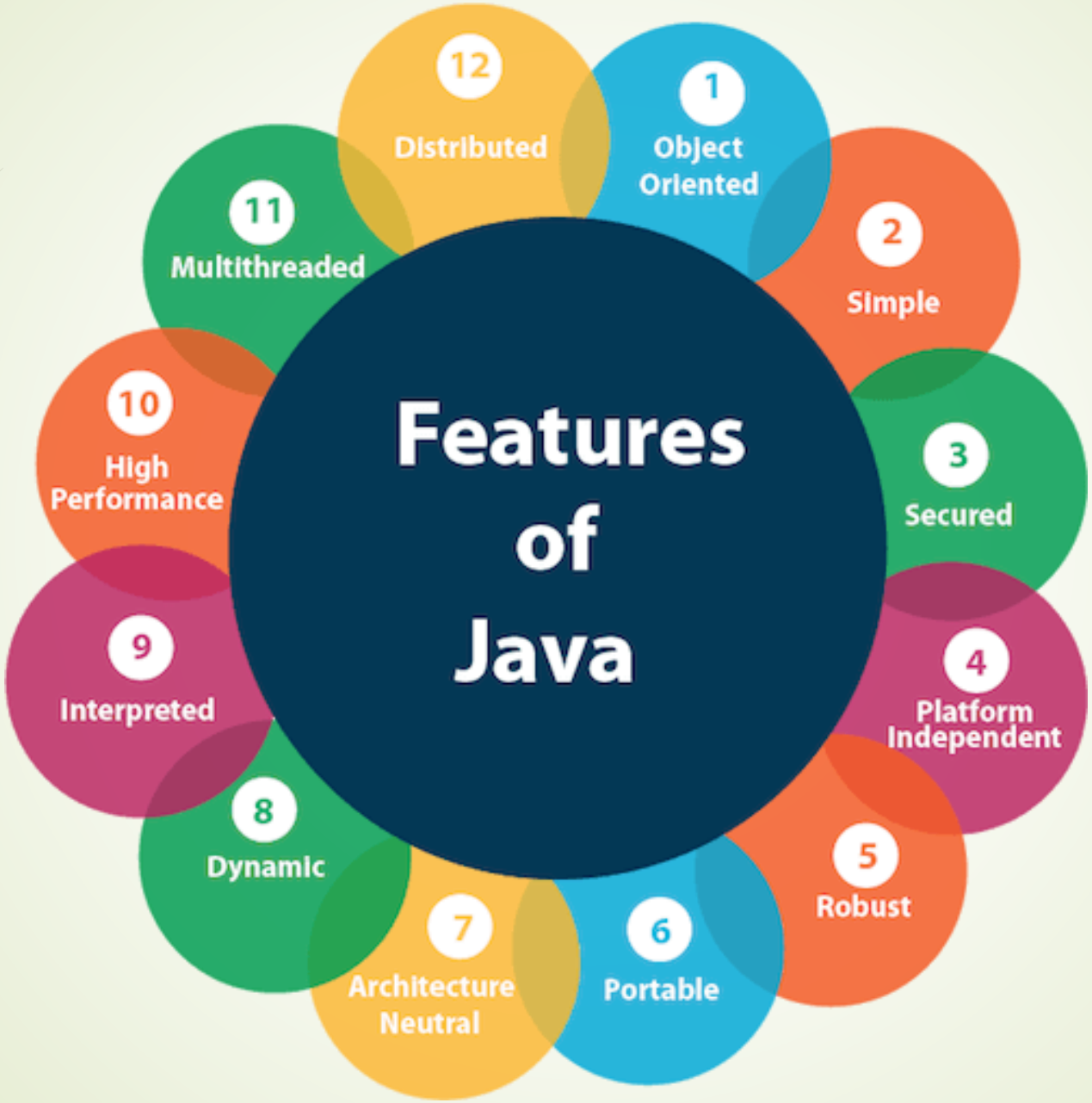
**Mob:- 8456953405**

# Features of Java

The primary objective of java programming language creation was to make it portable, simple and secure programming language. Apart from this, there are also some excellent features which play an important role in the popularity of this language. The features of Java are also known as Java buzzwords.

A list of the most important features of the Java language is given below.

1. Simple
2. Object-Oriented
3. Portable
4. Platform independent
5. Secured
6. Robust
7. Architecture neutral
8. Interpreted
9. High Performance
10. Multithreaded
11. Distributed
12. Dynamic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## 1. Simple

Java is very easy to learn, and its syntax is simple, clean and easy to understand. According to Sun Microsystem, Java language is a simple programming language because:

•Java syntax is based on C++ (so easier for programmers to learn it after C++).

•Java has removed many complicated and rarely-used features, for example, explicit pointers, operator overloading, etc.

## 2. Robust

The English mining of Robust is strong. Java is robust because:

•It uses strong memory management.

•There is a lack of pointers that avoids security problems.

•Java provides automatic garbage collection which runs on the Java Virtual Machine to get rid of objects which are not being used by a Java application anymore.

## 3. Object-oriented

Java is an object-oriented programming language. Everything in Java is an object. Object-oriented means we organize our software as a combination of different types of objects that incorporate both data and behavior.

Object-oriented programming (OOPs) is a methodology that simplifies software development and maintenance by providing some rules.

Basic concepts of OOPs are:

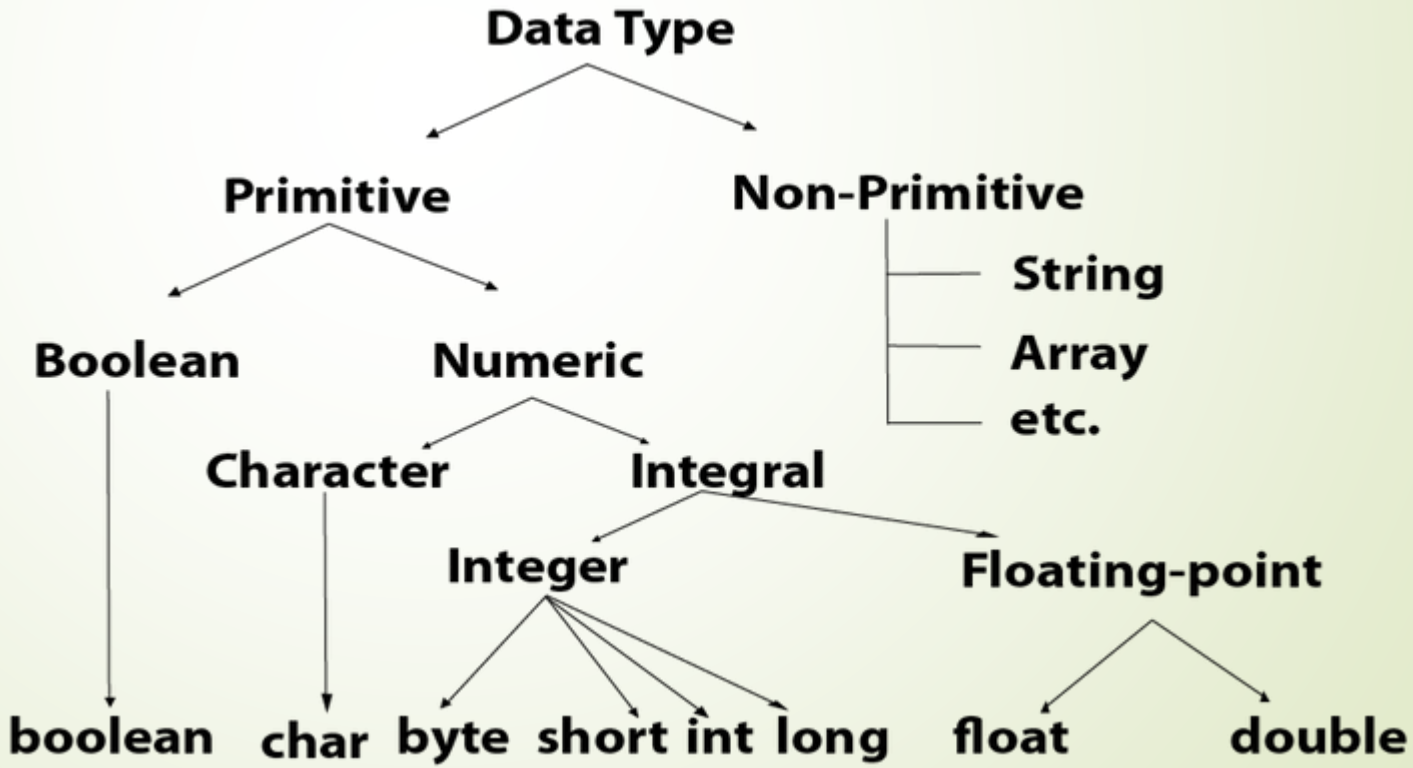
1. Object
2. Class
3. Inheritance
4. Polymorphism
5. Abstraction
6. Encapsulation

## Data Types in Java

Data types specify the different sizes and values that can be stored in the variable. There are two types of data types in Java:

**1.Primitive data types:** The primitive data types include boolean, char, byte, short, int, long, float and double.

**2.Non-primitive data types:** The non-primitive data types include Classes,Interfaces and Arrays.



## Control Flow in Java

Java compiler executes the code from top to bottom. The statements in the code are executed according to the order in which they appear. However, Java provides statements that can be used to control the flow of Java code. Such statements are called control flow statements.

Java provides three types of control flow statements.

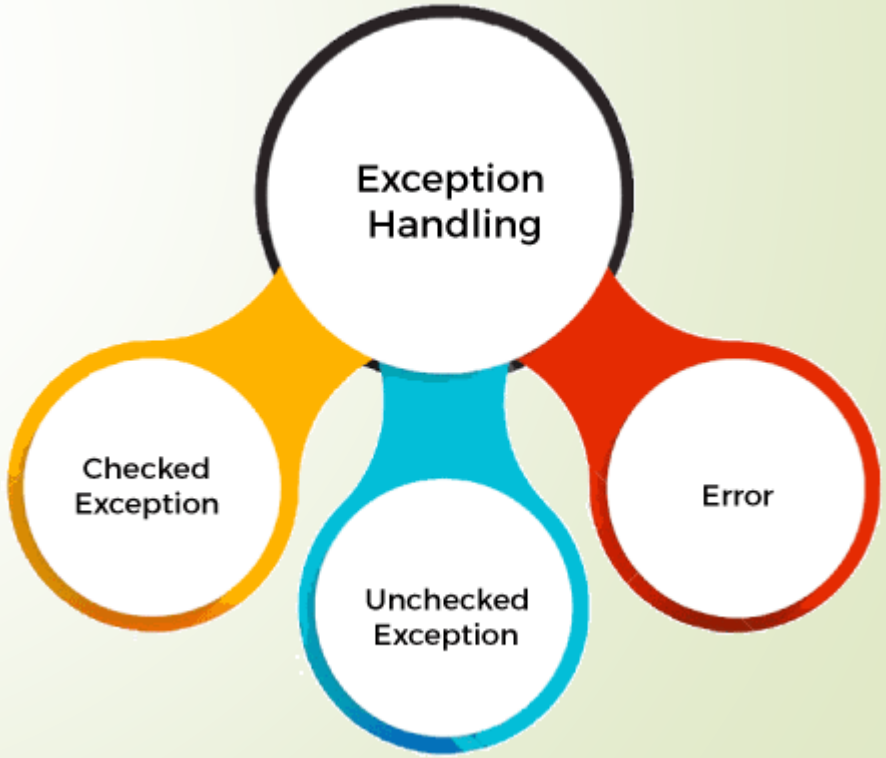
1.Decision Making statements
    1. if statements
    2. switch statement
2.Loop statements
    1. do while loop
    2. while loop
    3. for loop
    4. for-each loop
3.Jump statements
    1. break statement
    2. continue statement

# Exception Handling in Java

The **Exception Handling in Java** is one of the powerful *mechanism to handle the runtime errors* so that the normal flow of the application can be maintained.
Exception is an abnormal condition.
In Java, an exception is an event that disrupts the normal flow of the program. It is an object which is thrown at runtime.

There are mainly two types of exceptions: checked and unchecked. An error is considered as the unchecked exception. However, according to Oracle, there are three types of exceptions namely:

1.Checked Exception
2.Unchecked Exception
3.Error



# THANK YOU