

## PRACTICALS :

**PART-1**  
**ASSIGNMENT-1**

<b>1.</b>	<b>Introduction to Object Oriented Concepts, comparison of Java with other object oriented programming languages. Introduction to JDK, JRE, JVM, javadoc, command line argument.</b>		
<b>Object oriented concepts</b>	(1) <b>Class</b> : It is a blue-print of an object. (2) <b>Object</b> : It is an instance of a class. We can access the functions and data-members. (3) <b>Inheritance</b> : It acquires the characteristics and properties of existing class into another class. (4) <b>Polymorphism</b> : the ability of a message to be displayed in more than one form. (5) <b>Abstraction</b> : Abstraction is a process of hiding the implementation details and showing only functionality to the user. (6) <b>Encapsulation</b> : Wrapping up of data (variables) and code (methods) into a single unit.		
<b>Comparison of java with C and C++</b>	<b>C</b>	<b>C++</b>	<b>Java</b>
	It uses the top-down approach.	It uses the bottom-up approach.	It also uses the bottom-up approach.
	The code is executed directly.	The code is executed directly.	The code is executed by the JVM.
	There are <b>32</b> keywords in the C language.	There are <b>60</b> keywords in the C++ language.	There are <b>52</b> keywords in the Java language.
	It supports pointer.	It also supports pointer.	Java does not support the pointer concept because of security.
	It does not support the overloading concept.	Method and operator overloading can be achieved.	Only method overloading can be achieved.
	An array should be declared with size. For example, int num[10].	An array should be declared with size.	An array can be declared without declaring the size. For example : int num[];
	<b>THERE ARE ANOTHER LOT OF COMPARISON TOO.</b>		
<b>JDK</b>	<b>Standard Edition Development Kit</b> The JDK allows developers to create Java programs that can be executed and run by the JVM and JRE.		
<b>JRE</b>	<b>Java Runtime Environment</b> The JRE is the on-disk part of Java that creates the JVM.		

<b>JVM</b>	<b>Java Virtual Machine</b> The JVM is the Java platform component that executes programs.
<b>javadoc</b>	Javadoc (originally cased JavaDoc) is a documentation generator created by Sun Microsystems for the Java language (now owned by Oracle Corporation) for generating API documentation in HTML format from Java source code.
<b>Command line arguments</b>	Java command line arguments are <b>arguments that are passed to your program via a terminal or shell command.</b>