CORE JAVA

1.Introduction, features

2.Difference between c,c++ & java , installation

------ use NotePad --

3.Class, object

4.Jdk, jvm, jre

5.Data type

6.Variable

7.Keywords

8.Modifier(access & non-access)

9.Packages

10.Methods

11.Control statements (conditional, looping, jumping)

12.Oops [

Inheritance (single, multiple, multilevel, hybrid, hierarchy)

Polymorphism (compile-time, runtime)

Encapsulation

Abstraction (Abstract class, Interface)

Association (Aggregation , Composition)

Coupling(Tight coupling & Loose Coupling)]

----- use Eclipse --

13.Array , Arrays

14.String , String Buffer, String Builder

15.Exception handing(keywords, custom exception, try –with resources)

16.File Handling (File, FileReader, FileWriter, FileInputStream, FileOutputStream)

17.Inner-Classes, Wrapper-Classes ,Object Class

18.Cloneable (Shallow Copy & Deep Copy)

19.Multi-Tasking (Multi-Threading, Inter-thread communication, DeadLock)

20.Collection - with algorithms, Generics, User-defined class as Generic

List (ArrayList, LinkedList, Vector, Stack)

Cursors

Set (HashSet,LinkedHashSet,TreeSet)

Queue (PriorityQueue, ArrayDequeue)

21.Collections class,ConcurrentModification

22.Comparable , Comparator (with algorithms)

23.Map – with Algorithms

(HashMap, LinkedHashMap, TreeMap)

WeekHashMap,IdentityMap,HashTable,ConcurrentHashMap

24.Hash Collision, Fail-fast & Fail-safe Iterator

25.Java Executor Service (Multi-Threading)

26.Serialization ,MarkerInteface

27.Patterns & Principle