1. Explain what is meant when it says: Јava-programming language and Јava-platform.

1.1. Java is high level ,object-oriented and secure programming language and save

2. Explain how the name of the Java file is related to the classes that are declared in this file.

2.1.java programming firest is seve as java file , when compiled it for byte code which is class file if we mad our program file similar to class it will be comfortable to understand we can use any name when file is public class

2.2. file name must have the same name as public class name to till JVM is any entry point

2.3. suppose when we creat program which more than one class reside after compiling java source file will generat the same number of class file as class .

3. Decipher the abbreviations JVM, JDK and JRE; show where they are and what they are. Explain how to compile and run the application from the command line, and also why, in environment variables, specify the paths to the installed јdk.

3.1.java virtual machine (JVM) Specificitoin,implementation,instance,loade cood ,verifies code,

Executes code ,provides runtime environment.

3.2 (JRE)java runtime environment, is an acronym for java runtime environment its also writing as java RTE the java runtime environment is set of software tools which are used for developing the runtime environment . it is the implementiton of JVM it phoysically exists it contains set of libraries + other files the JVM use at runtime .

The implementation of jvm is also actively released by other companies besides sun micro system .

3.3(jdk) java development Kit is an acronym for java development kit the java development kit JDK is software development environment which is used to develop java application and applets .it physically exists it contains JRE+development tools.

JDK is an implementation of any one the below given java platforms released by oracle corporation :

.standard edition java platform

.enterprise edition java platform

.micro edition java platform

The JDk contains a private java virtual machine JVM and few other resource such as an interpreter loader Java complier java an archiver jar documentation generator java doc to complete the development of java .

4. List the access attributes, explain their effect.

5. What are packages in a Java program, what are packages on disk? What is the package naming convention? How to make a package?

5.1.package is filed for naming and also organizational method of java programming file ,package is collection of related items , when you create your problem from the first time you will find default package /package / box and inside it there is one class which is the main class.

5.2. package management system (abbreviated as PMS) is set of tools that automatically organize, update, delete software packages from computer. An any Unix-like systems package management can upgrade the entire distribution and most packages on the device with ease

5.3. term used in project management and refers to one of the components of work fragmentation structure Work. The planning package can be transformed into work package by adding higher level of ... The system is designed to centralize, integrate and process information for effective decision-making is the professional designation conferred by the College of Financial .

6. Explain which classes. interfaces, transfers must be imported into your program, how to do it Does importing a package affect the import of classes and others that are in subpackages? Which package in Јava is imported by default?

6.1 All business methods exposed to remote client of an EJB must be declared It's also important to notice that our business interface is referencing the view classes The same Data Transfer Object (DTO) pattern introduced in Chapter 7 applies With our business interface defined,

6.2. The Java compiler looks for classes in the following order

In explicitly imported classes.

In the package.

Finally, in the wild-carded imports.

So, if you have class called Set in your package import java.util.\* has completely different meaning from import java.util.Set.

6.3. There can be just a single bundle affirmation in each source record, and it identifies with a wide range of the archive.

On the off chance that the package articulation is not utilized then the class, interfaces, counts, and explanation sorts will be put into an un-named bundle.

7. Explain the differences between the terms “object” and the reference to the object!

7.1. Object is anything that can be dealt with by programming language commands, such as value, variable, function, or data structure. Meaning that the word organism refers to any living or non-living organism such as a person or a car, and this object is in If every object has a type, then two objects of the same class will have the same type

8. What primitive types of Java do you know how to create variables of primitive types? Explain the procedure by which variables of primitive types are passed to methods as parameters.

8.1. Primitive types. Primitive types are the simplest types of data available in Java. There are 8: Boolean, Byte, Letter, Short, International, Long, Floating and Double. These types act as basic elements for data processing in java

8.2. Passing primitive types When Java calls method, it creates a copy of its actual parameters and sends the copies to the way that the formal parameters become. Then when the method returns, these copies are ignored and the variables in the main code are the same as before

9. What is the size of primitive types how the size of primitive types depends on the platform bitness, what type conversion (casting) is and why it is needed / What primitive types are not cast to any other type

9.1. Primitive types are the most basic data types available within the Java language. There are 8: boolean, byte, char, short, int, long, float and double. These types serve the building blocks of data manipulation in Java

9.2 When Java calls method, it makes copy of its actual parameters and sends the copies to the method where they become the formal parameters. Then when the method returns, those copies are discarded and the variables in the main code are the same as before.

10. Explain what explicit and implicit type conversion is, give an example s when such conversion IMEET MeCTO.

10.1 Implicit type conversion occurs when the compiler is expecting a value of one type but is given a value another type. Explicit type conversion occurs when the user uses a type cast to convert a value from one type to another type

11. How are types handled when calculating arithmetic expressions in Јava?

11.1. Java el tipo de la variable debe ser ... El operador + está sobrecargado en Java con los siguientes prototipos aritméticos Tenga en cuenta que 1 + 1 da como resultado 2 mientras que "1" +1 y 1+ "1" ambos dan como resultado "11" La primera expresión cambia la variable x para almacenar el valor actual en la variable

12 What are literals in a Java program, what classification of literals do you know how to write literals of various kinds and types in a Java program?

12.1. Java Literals are syntactic representations of boolean, character, numeric, or string data. Literals provide a means of expressing specific values in your program. For example, in the following statement, an integer variable named count is declared and assigned an integer value.

12.2. As we know that java is a case-sensitive programming language but here java is not NOTE: By default, every literal is of int type, we can specify explicitly as long type by If you like GeeksforGeeks and would like to contribute, you can also write an .

13. How are types handled when calculating arithmetic expressions in Јava? What are wrapper classes, what are they for? Explain what a shell class object means and a constant object.

13.1 Tokens of type number have an associated numeric value, while operators will have an The basic algorithm for handling arithmetic expressions without parentheses makes use of The following Java class implements this data structure

13.2 we can wrap a primitive value into a wrapper class object. Need of Wrapper Classes. They convert primitive data types into objects The classes in java.util package handles only objects and hence wrapper classes help in this .

14. Explain the difference between primitive and reference data types.

14.1. difference is that primitive variables store the actual values, whereas Let's assume that a class Person is already defined

Or mean primitives are data types, while references are pointers, which do not

15. Explain what auto-packaging and auto-packaging are.

15.1

16. List the arithmetic, logical and beaten operators known to you, determine the case of their use. What is the priority of the berator, how to determine in which sequence the operations will be performed in the expression, if several of them have the same priority

16.1 An operator is called a unary, binary, or ternary operator based on the number of operands called an arithmetic operator, a relational operator, a logical operator, or a bitwise It means, both operands to arithmetic operators must be one of types byte

17. Indicate the rules for performing the operation with a floating point in Java (according to the IEEE754 standard. How to determine that the result of the calculation is infinity or non-number

17.1Java uses a subset of the IEEE 754 binary floating point standard to represent floating point numbers and define the results of arithmetic operations 23 bits for the mantissa M. The decimal number is represented according to the following formula. The integer types do not indicate overflow in any way.

18. What is static import, what elements can be imported with static import .

18.1 Difference between import and static import With the help of import, we are able to access classes and interfaces which are present in any package. But using static import, we can access all the static members (variables and methods) of a class directly without explicitly calling class name.

19 Explain the operation of the statements if switch [white.do](https://vk.com/away.php?utf=1&to=http%3A%2F%2Fwhite.do) while, for for-each. Find the correct examples of the operation of these statements.

19.1In looping, a program executes the sequence of statements many times be well defined and specified otherwise the loop will execute an infinite number of times If a condition is true then and only then the body of a loop is executed This type of operation can be achieved by using a do-while loop.

20 Explain the works operator instance of What the result will be the atom of the operator’s work if the link to the beer stands at his left

20.1. An object of subclass type is also a type of parent class. For example, if Dog extends Animal then object of Dog can be referred by either Dog or Animal class

21. Explanation of the inctancef operator. What will be the result of the operator if there is an empty link to his left

21.1 The instanceof operator tests whether the prototype property of a It can also be changed by changing an object's prototype using Object. For instance, you can securely check if a given object is, in fact, an Array using Array is Array In code using XPCOM, instanceof has special effect obj instanceof