

QUESTIONS AND ANSWERS ON JAVA

Question 1- What are the two paradigms for Object Oriented Programming?

Answer- The two paradigms for Object Oriented programming are as follows:-

1. **Process oriented** It can be thought of as code acting on data. Example is **C language**
2. **Object oriented** It can be thought of as data controlling access to code. Example is **Java**

Question 2-What are the Features of Java?

Answer- The features of JAVA are as follows-

1. Simple and Secure.
2. Portable and Robust.
3. Machine Independent.
4. Multithreaded.
5. Distributed and Dynamic.

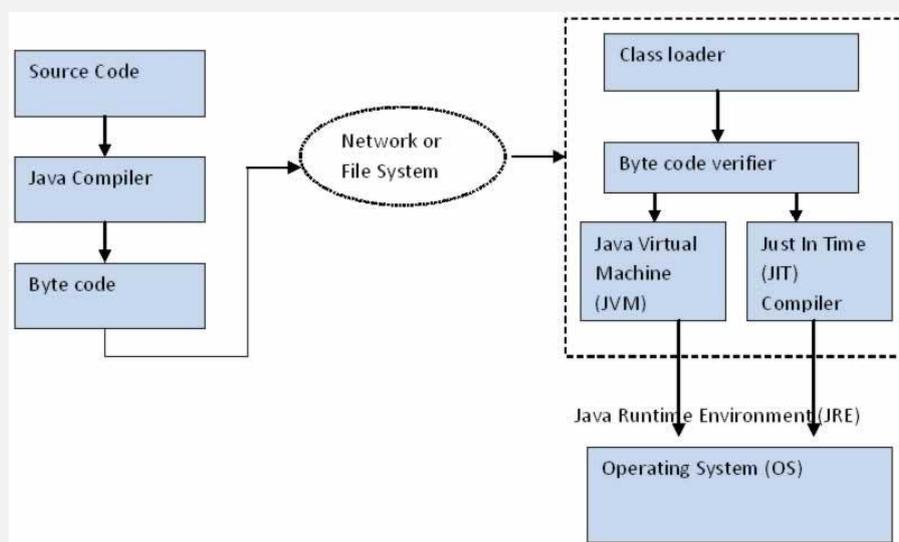
Question 3-Why Java is a strongly typed language?

Answer- It is a strongly typed language because:-

1. Every variable and expression has a strongly defined type.
2. All assignments are checked for type compatibility.

Question 4- Draw a diagrammatic representation of Java?

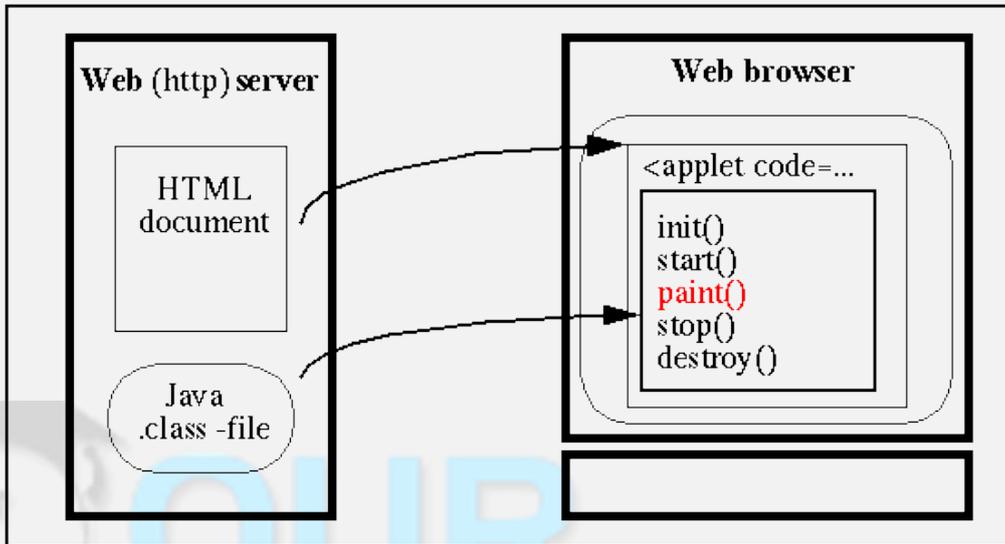
Answer- Architecture can be represented as:-



Architecture of JAVA

Question 5-What do you mean by Java Applet?

Answer- An applet is a special kind of Java program that is designed to be transmitted over the internet and automatically executed by a **Java compatible web browser**. They are downloaded on demand without interacting with user. The following figure explains loading and start-up of an applet.



Java Applet

Question 6-How will you define packages in java?

Answer- A package is a mechanism for organising the classes. They can be stored in compressed files called **JAR files**. Java packages have following features:-

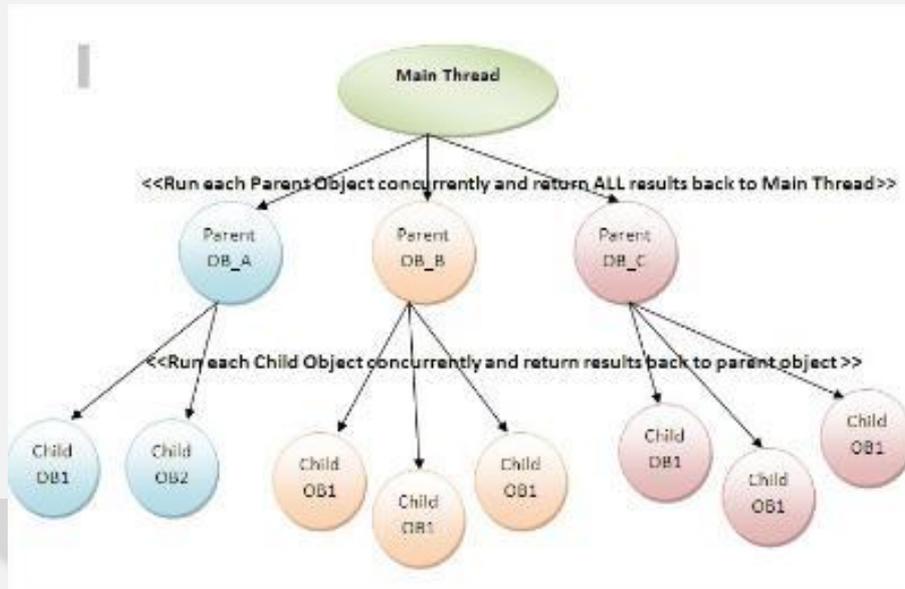
1. Package provides a unique namespace for the types it contains.
2. Classes in the same package can access each other's package / access members.

Question 7- Explain Runtime polymorphism in Java?

Answer- When a method of the same name and signature is included in both super and subclasses then the method in the subclass is said to override the method in superclass.

Question 8-What do you mean by Multithreaded programming in Java?

Answer- A multithreaded program contains two or more parts that can run concurrently. Each of these parts is known as a thread which is the smallest unit of dispatchable code. Each thread defines a separate path of execution.



Multithreading in JAVA

Question 9-Explain the concept of For Each loop in Java?

Answer- It is also known as **Enhanced for loop**. It is implemented without using any other keyword. The journal structure of for each loop is

syntax :

for(type iteration variable: collection)

```
{  
statement block  
}
```

For example-

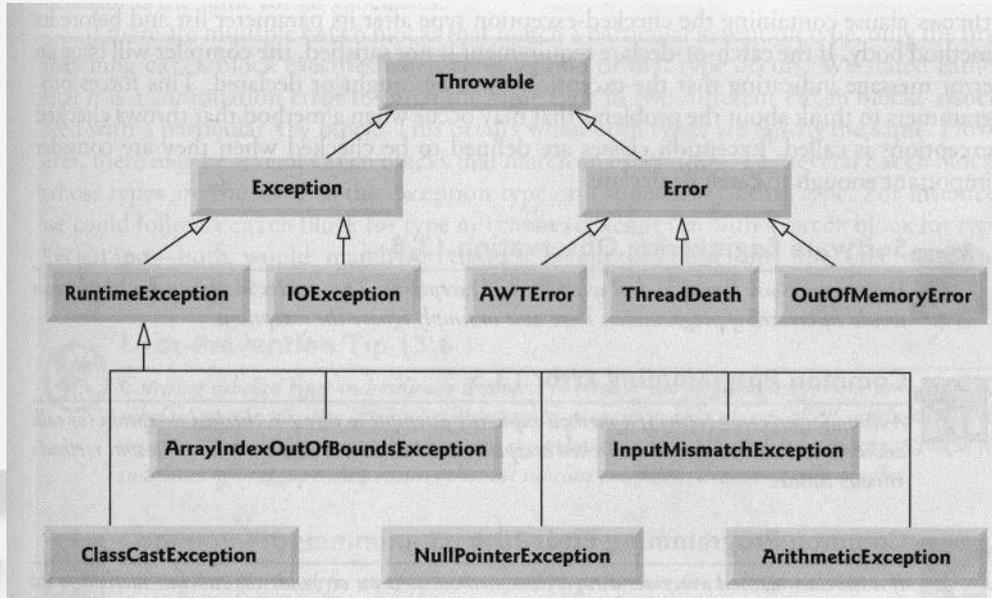
```
int nums[ ] = {1,2,3,4,5,6};  
int sum=0;  
for(int x: nums)  
{  
sum += x;  
}
```

Question 10-Explain the concept of Exception handling in Java?

Answer- An exception is an abnormal condition that arises in a code sequence at run-time. In Java, exception can also be handled by user by using following five keywords:

Try, Catch, Finally, Throw, Throws

Exception hierarchy can be understood by the following diagram:



Exception hierarchy in JAVA