1. **What do you mean by MVC?**

Ans: MVC stands for Model-View-Controller. It’s a way of designing an application that separates data access, business logic and the graphical user interface.

1. **What are the types of Events?**

Ans: There are twelve types of event are used in Java AWT. These are as follows:

ActionEvent AdjustmentEvent

ComponentEvent ContainerEvent

FocusEvent InputEvent

KeyEvent MouseEvent

ItemEvent PaintEvent

TextEvent WindowEvent

1. **What is look and Feel? Write the look default class the look and feel.**

Ans: look and feel is a mechanism used in the Java Swing widget toolkit allowing to change the look and feel of the graphical user interface at runtime.

Default look and feel class is javax.swing.plaf.metal.MetalLookAndFeel.

1. **What are the Event Listeners?**

Ans: Event Listeners are generally interfaces. Every listener interface has at least one event type. It is a procedure (action) or function in a computer program that waits for an event to occur; that event may be a user clicking or moving the mouse, pressing a key on the keyboard, or an internal timer or interrupt.

1. **What is an event handler?**

Ans: An event handler typically is a software routine that processes actions such as keystrokes and mouse movements. With Web sites, event handlers make Web content dynamic. (An event handler is a part of a computer program created to tell the program how to act in response to a specific event)

1. **What is adapter class?**

Ans: An adapter class provides the default implementation of all methods in an event listener interface. Adapter classes are very useful when you want to process only few of the events that are handled by a particular event listener interface.

1. **What is the advantage of adapter class? Write down three adapter class.**

Ans: If a class extends an Adapter Class, we can override some methods which is needed;

It can simplify the creation of the Event handlers in definite situations;

three adapter class--

MouseAdapter, MouseMotionAdapter and WindowAdapter

1. **What is Serialization and deserialization?**

Serialization is a mechanism of converting the state of an object into a byte stream.

Deserialization is the reverse process where the byte stream is used to recreate the actual Java object in memory.

1. **What are the daemon threads?**

Ans: Daemon thread are service provider threads run in the background, these not used to run the application code generally.

**10. How you classify stream?**

Ans: The java.io package contains the Java I/O stream classes. These classes are classified as follows

● Character and Byte Streams

– Character vs. Byte

● Input and Output Streams

– Based on source or destination

● Node and Filter Streams

– Whether the data on a stream is manipulated or transformed or not.

**11. What is difference between ArrayList and vector?**

Ans: 1) ArrayList is not thread-safe whereas Vector is thread-safe.

2) Vector is synchronized by default, and ArrayList is not.

3) ArrayLists grow by 50% of the previous size when space is not enough for

New element, and Vector will grow by 100%.

**12. What do you know about Container and Component?**

Ans: Container manage the child Components and LayoutManager. Derived from Component.

Component is an abstract class underlying JPanel, JFrame etc. Derived from Object.

**13. What is different between JFrame and JWindow?**

Ans: JFrame: A resizable, movable window with title bar and close button. Usually it contains JPanels.

JWindow: A window without a title bar or move controls. The program can move and resize it, but the user cannot. It has no border at all.

**14. What are the differences between Swing and AWT?**

AWT: AWT stands for Abstract windows toolkit.

AWT components are heavy weight.

AWT occupies more memory space.

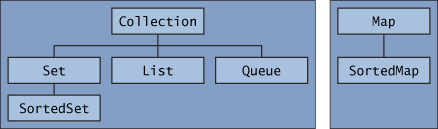
Swing: Swing is a part of Java Foundation Class (JFC).

Swing components are light weight.

Swing occupies less memory space.

**15. What is collection? Write the type of collection?**

Ans: In java Collection is an interface that represent different types of collections, such as sets, lists and maps.



**16. What is layout manager?**

Ans: A layout manager is an object that implements the LayoutManager interface and determines the size and position of the components within a container.

**17. What is thread scheduler?**

The thread scheduler then determines which task should execute next, based on priority and other factors. The Java thread scheduler is very simple. All threads have a priority value

which can be changed dynamically by calls to the threads setPriority() method.

**18. Write down the basic features of Swing?**

Swing is a part of Java Foundation Class (JFC).

Swing components are light weight.

Swing occupies less memory space.

"Pluggable" look and feel. Can change look and feel at runtime, or design own look and feel.

**19. What is command line Argument?**

The command line argument is the argument passed to a program at the time when you run it. These arguments are strings. To access the command-line argument inside a java program is very easy. we can provide the program with zero or more command-line arguments.

**20. Write the lifecycle method of a thread.**

void start()-Creates a new thread and makes it runnable.

void run()-This method can be called only once.

void stop()-The new thread begins its life inside this method. wait(),notify(), notifyAll().

**21. What is the difference between yield() and sleep()?**

a) If we say thread.sleep(1000), that thread will sleep for 1000 milliseconds for sure, but yield() there is no such guarantee.

b) sleep() method does not cause currently executing thread to give up any monitors while yield() method give up the monitors.

c) Sleep() method throws the Interrupted exception but yield() method does not throw Interrupted Exception.

**22. What do you mean by Generic?**

Generics is to enable errors to be detected at compile time rather than  
at runtime. A generic class or method permits you to specify allowable types of objects that  
the class or method can work with.

**23. What is a Thread?**

Ans: A thread is the flow of execution, from beginning to end, of a task. All Java programs have at least one thread, known as the main thread. Which is created by the JVM.

**24. What are the two ways of creating thread?**

Ans: There are two ways to create a new thread.

1. Implements the Runnable interface
2. Extend the Thread itself and override its run() method.

**25. What is the difference between wait() and sleep()?**

a) wait() is a method of Object class, sleep() method of Thread class.

b) Wait() releases the lock but sleep() doesn’t releases the lock.

c) Wait() non-static method but sleep() static method.

**26. What is the use of synchronized keyword?**

Ans: We can use the keyword synchronized to synchronize the method. So that only one thread can access the method at a time. (Only one thread at a time can access synchronize methods).

**27. What is deadlock?**

Ans: When two threads are waiting for each other and can’t proceed until the first thread obtains a lock on the other thread, the program is said to be in a deadlock.

**28. What is stream?**

Ans: A stream is a flow of data form a source to a sink.

Sources and sinks are also called input streams and output streams.

Java technology supports two type of data in stream raw bytes or Unicode character.

**29. Deference between Comparable and Comparator Interface?**

a) Comparable is a member of java.lang package but Comparator java.util.package.

b) Comparable sorts the objects is natural order but Comparator sorts the objects is custom order.

c) Comparable method is compareTo(object), Comparator method is compare(object1, object2).

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*Round-37*