**2. What is deadlock?**

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

**3. What is stream? How you classify them?**

A **stream** is a sequence of data flowing from a source to a destination. The connection between a **program** and a **data** **source** or **destination** is called a **stream**.

two type of data in stream **raw bytes** or **Unicode character**.

● **Character and Byte Streams**

**● Input and Output Streams**

**● Node and Filter Streams**

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

An event is an object that is created when something changes within a graphical user interface. If a user clicks on the JButton, a button click event is triggered, the event will be created, and it will be sent to the relevant event listener.

There are twelve types of event are used in Java AWT.

|  |  |  |
| --- | --- | --- |
| ActionEvent | FocusEvent | MouseEvent |
| AdjustmentEvent | InputEvent | PaintEvent |
| ComponentEvent | ItemEvent | TextEvent |
| ContainerEven | KeyEvent | WindowEvent |

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

J2SE 5.0 provides compile-time type safety with the Java Collections framework through generics .This allow us to specify, at compile-time, the types of objects we want to store in a Collection. So we don't need to cast anything.

8.

New Thread

Dead Thread

Running

Runnable

run() method returns

while (…) { … }

Blocked

Object.wait()

Thread.sleep()

blocking IO call

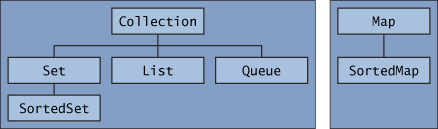
waiting on a monitor

thread.start();

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

A collection is a container that groups similar elements into an entity. In java Collection is an interface that represent different types of collections, such as sets, lists and maps. These interfaces form the basis of the framework.

The core Collection interface encapsulates different types of collections.



**11. What is a Thread? two ways of creating thread?**

A thread is the flow of execution of a single set of program statements. The Thread Class allows multitasking by instantiating many threaded objects, each with their own run time characteristics.

There are two ways to create a new thread.

a) **Extend the Thread**

b) **Implements the Runnable interface**

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

synchronized keyword can be applied to static/non-static methods or a block of code. Only one thread at a time can access synchronized methods and if there are multiple threads trying to access the same method then other threads have to wait for the execution of method by one thread.

**13. What is Event handler?**

An event handler is a part of a computer program created to tell the program how to act in response to a specific event.

Three Steps of Event Handling

* Prepare to accept events import package java.awt.event
* Start listening for events include appropriate methods
* Respond to events implement appropriate abstract method

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

Serialization is the process of transforming an in-memory object to a byte stream.

Deserialization is the inverse process of reconstructing an object from a byte stream to the same state in which the object was previously serialized.