**1. Difference between wait and sleep?**

|  |  |
| --- | --- |
| **wait()** | **sleep()** |
| wait() method releases the lock | sleep() method doesn't release the lock. |
| is the method of Object class | is the method of Thread class |
| is the non-static method | is the static method |
| should be notified by notify() or notifyAll() methods | After the specified amount of time, sleep is completed. |

**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.**

Java technology supports 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?**

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

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

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

|  |  |
| --- | --- |
| **Swing** | **AWT** |
| Swing is light-weight components. | AWT is heavy-weight components. |
| Swing components are OS independent. | AWT is OS dependent because it uses native components, |
| We can change the look and feel in Swing | It is not possible in AWT |
| Swing takes less memory compared to AWT. | AWT takes More memory |
| Swing uses double buffering. | For drawing AWT uses screen rendering |

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

|  |  |
| --- | --- |
| **JFrame:** | **JWindow:** |
| A resizable, movable window with title bar and close button. Usually it contains JPanels. | 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. |
| The entire application is usually a JFrame. | It optionally has a parent JFrame |

**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

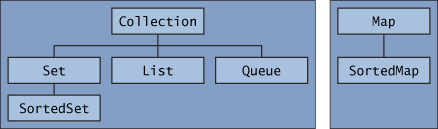
waiting on a monitor

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.



**10 .Difference between Comparable and Comparator Interface?**

|  |  |
| --- | --- |
| **Comparable** | **Comparator** |
| Comparable is a member of java.lang package. | Comparator is a member of java.util.package. |
| Sorts the objects is natural order. | Sorts the objects is custom order. |
| Its method is compareTo( object) | Its method is compare(object1, object2) |