MultiThreading
Assignment Questions

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1. **What do you mean by Multithreading? Why is it important?**

   Ans :

- **Multithreading is the concept of java to complete multiple tasks at the single time of the same process.**

- **The multitasking is done within the single process with the multiple threads for each set of tasks.**

- **Multithreading is important because it allows us to run multiple tasks at the same time in the single process, and it can reduce the time of the compiler to execute.**

- **The multithreading is achieved by extending Thread class or implementing Runnable interface.**

2. **What are the benefits of using Multithreading?**

   Ans :

- **Multithreading is very beneficial because it can reduce the wastage of time which is produced at the runtime.**

- **We can run multiple tasks in a single process.**

- **There are independent threads which are controlled by the thread scheduler.**

3. **What is Thread in Java?**

   Ans :

1. **The thread is the line of execution which is responsible for executing the task of a single process.**

- **The Thread is the class which can implement the runnable interface.**

- The Thread can be used to handle the various tasks by the multiple threads in the same process.

4. **What are the two ways of implementing thread in Java?**

   Ans :

- There are two ways to implement the Thread in java

    1. By extending Thread class.
    2. By implementing a runnable interface.

5. **What's the difference between thread and process?**

   Ans :

- The process is the task or set of work the process is the big set of task

- The Thread is used to execute the multiple tasks which are present inside the single process by using the concept of multithreading.

6. **How can we create daemon threads?**

   Ans :

- The daemon thread is created by writing the thread in the infinite loop and using the command Thread.setDaemon(true).

7. **What are the wait() and sleep() methods?**

   Ans :

- The wait () method is only used inside the synchronized method to send the thread to the Blocked State.

- The sleep() method is used to produce the delay while execution of thread. By giving sleep we can send thread to the blocked state for a specific amount of time.