

Q1) Make a thread that will calculate a product of 1 to 10 and another thread (main thread) will print the calculated value of the first thread.

Note: make use of the wait and notify method.

Q2/ What is the Difference between the **wait** and **sleep** methods?

Q3/- What is the difference between the **Class level lock** and the **Object level lock**?

Q4/- What is the difference between the synchronized block and the synchronized method? Write down the different syntaxes of the synchronized block with examples.

Q5/ What is a ThreadPool, how to create a thread pool of 4 threads, and write down the difference between the Callable and Runnable interface.

Q6/- Create a ThreadPool of 3 threads, submit the 6 tasks using Callable, and from each task check whether the supplied number is Odd or even, if the number is Odd return "Odd Number" and if the number is even then return "Even Number".

Note: Supply the number to the Callable task through the constructor of the Callable task class.

Q7/- Explain about thread synchronization(inter-thread communication).