***Multi-Threading Vs Multi-Tasking***

***Async***

Firstly talk about the difference between Multi-threading and Multi-tasking. Majority people are confused between these term. The first think is Multi-tasking is logical extension to multiprogramming, and the second think is Multi-threading is thread-based multi-tasking. The basic difference between Multitasking and multithreading is that **Multi-tasking** allows  CPU to perform multiple tasks (program, process, task, threads) simultaneously whereas, **Multi-threading** allows multiple threads of the same process to execute simultaneously.

**Comparison Multi-Threading Vs Multi-Tasking**

* There are three types of comparison Basic, Switching, Memory and Resource. These types are define below table.

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| **Basis for comparison** | **Multi-Threading** | **Multi-Tasking** |
| Basic | Multi-threading let CPU to execute multiple threads of a process simultaneously. | Multi-tasking let CPU to execute multiple tasks at the same time. |
| Switching | In multi-threading CPU switches between the threads frequently. | In multi-tasking CPU switches between programs frequently. |
| Memory and Resource | In multi-threading system has to allocate memory to a process, multiple threads of that process shares the same memory and resources allocated to the process. | In multi-tasking system has to allocate separate memory and resources to each program that CPU is executing. |