

Multi Tasking:

Executing several tasks simultaneously is the concept of multitasking.

There are 2 types of Multi Tasking

- 1.Process based Multi Tasking
- 2.Thread based Multi Tasking

1.Process based Multi Tasking:

Executing several tasks simultaneously where each task is a separate independent process is called process based multi tasking.

We can listen audio songs from the system, at the same time we can download a file from the internet. All these tasks are executing simultaneously and independent of each other. It is best suitable at operating system level.

2.Thread based MultiTasking:

Executing several tasks simultaneously where each task is a separate independent part of the same program, is called Thread based multi tasking, each independent part is called a Thread. This type of multi tasking is best suitable at programmatic level.

NOTE: We can reduce execution time and improve performance.!

Example:

```
import time
def CalSquareNums(numbers):
    print("Calculate Square Of Numbers")
    for n in numbers:
        time.sleep(0.2)
        print('SQUARE:',n*n)

def CalCubeNums(numbers):
    print("Calculate Cube Of Numbers")
    for n in numbers:
        time.sleep(0.2)
        print('CUBE:',n*n*n)

arr = [2,3,4,5,6,7]
stime = time.time()
CalSquareNums(arr)
CalCubeNums(arr)
print("done in : ",time.time()-stime)
print("Hah... I am done with all my work now!")
```