

CPU bound processes

### Bench mark A:

- We observe that total cpu time is similar for all the processes. We observe that preempt2 is always 0 since no I/O bound process to preempt them.
- We observe that response time is very large compared to that of I/O bound processes

```
I'm K MEHER HASANTH and my username is kmeherha.  
Test process running code in my hellow:
```

```
Cpubound id: 5  
,totcpu: 1271  
,usercpu: 1307  
,resptime: 13593  
,maxresptime: 10185  
,contextswitches: 13  
,preempt1: 13  
,preempt2: 0
```

```
Cpubound id: 6  
,totcpu: 1271  
,usercpu: 1240  
,resptime: 13861  
,maxresptime: 10266  
,contextswitches: 13  
,preempt1: 13  
,preempt2: 0
```

```
Cpubound id: 7  
,totcpu: 1271  
,usercpu: 1240  
,resptime: 14115  
,maxresptime: 10278  
,contextswitches
```

```
Cpubound id: 8  
,totcpu: 1271  
,usercpu: 1240  
,resptime: 14368  
,maxresptime: 10288  
,contextswitches: 13  
,preempt1: 13  
,preempt2: 0
```

```
Cpubound id: 9  
,totcpu: 1271  
,usercpu: 1240  
,resptime: 14622  
,maxresptime: 10300  
,contextswitches: 13  
,preempt1: 13  
,preempt2: 0
```

```
Cpubound id: 10  
,totcpu: 1271  
,usercpu: 1240  
,resptime: 14876
```

## IO bound processes

### Bench mark B:

- We observe that for benchmark B IO bound process has similar total cpu and usercpu time they have preempt2 >0.

I'm K MEHER HASANTH and my username is kmeherha.  
Test process running code in my hellow:

jobound id: 6  
,totcpu: 4169  
,usercpu: 4051  
,resptime: 417  
,maxresptime: 2387  
,contextswitches: 47  
,preempt1: 20  
,preempt2: 20

jobound id: 8  
,totcpu: 833  
,usercpu: 813  
,resptime: 2583  
,maxresptime: 3937  
,contextswitches: 17  
,preempt1: 12  
,preempt2: 3

jobound id: 9  
,totcpu: 972  
,usercpu: 952  
,resptime: 1984  
,maxresptime: 4099  
,contextswitches: 23  
,preempt1: 16  
,preempt2: 5

jobound id: 10  
,totcpu: 833  
,usercpu: 817  
,resptime: 3613  
,maxresptime: 5432  
,contextswitches: 18  
,preempt1: 14  
,preempt2: 7

jobound id: 7  
,totcpu: 1111  
,usercpu: 1085  
,resptime: 1691  
,maxresptime: 2799  
,contextswitches: 27  
,preempt1: 19  
,preempt2: 8

## Benchmark C

When mixture of both CPU bound and IO bound processes are spanned together. We observe that response time of CPU bound process is much greater than IO bound processes.

```
iobound id: 10
,totcpu: 5419
,usercpu: 5265
,resptime: 242
,maxresptime: 1108
,contextswitches: 47
,preempt1: 10
,preempt2: 14

Cpubound id: 7
,totcpu: 543
,usercpu: 532
,resptime: 13930
,maxresptime: 10645
,contextswitches: 11
,preempt1: 11
,preempt2: 5
```

## Bench Mark D

We would observe that no CPU bound process gets to run and starvation occurs