(1) The following criteria should be maximize: CPU utilization, throuput.

(2) The following scheduling algorithm are often use for a long term (job) scheduling: SJF, SRTF

(*) (3) A process running in parallel may be excute:- simultaneously on single core, concurently on multiple core, concurrently on single core.

(4) All thread belong to the same process have the same: code section, data section, OS resourse.

Q: Calculate Prediction of the next CPU burst, given that it initial burst is equal to 5ms and the past history is 0.3 So the weigh is 1-0.3=0.7

$Z_0 = 5ms$

$Z_1 = 0.7 * 5 = 3.5\ ms$

$Z_2 = 0.7 * 3.5 + 0.3 * 5 = 3.95\ ms$

$Z_3 = 0.7 * 3.95 + 0.3 * 3.5 = 3.815\ ms$

$Z_4 = 0.7 * 3.815 + 0.3 * 3.95 = 3.855\ ms$

$Z_5 = 0.7 * 3.855 + 0.3 * 3.815 = 3.843\ ms$

Q: if the priority secheduling algorthim 8 bit giving that the lowest number is the highest priority, and the highest number is the lowest number.

- what is the value of lowest priority?

$2^8 - 1 = 255$

- what is the value of highest priority?

0

- what is the time require to prevete the priority of the the process from the lowest to highest? to increment the process priority every 2min?

$(255 - 0) \times 2 = 255 * 2 = 510\ min \approx 9\ hours$