

CSCI 315 Operating Systems Design

Activity 15

Work in teams of four students for this activity.

- 1) Use the table below to enumerate the advantages and the disadvantages of the scheduling algorithms indicated.

	Advantages	Disadvantages
Preemptive Shorted Job First		
Preemptive Priority		

- 2) As you know, processes and threads don't arrive at a system tagged with the length of their CPU-burst. One can, however, use *exponential averaging*, an estimation process that starts from an initial measured CPU burst t_0 with an initial estimated CPU burst T_0 . For the given values below, apply exponential averaging to calculate the estimated CPU burst T_4 for two values of α arbitrarily chosen: $\alpha = 0.2$ and $\alpha = 0.7$. Explain which value should work better for the CPU burst length estimation process.

$$T_0 = 2, t_0 = 4, t_1 = 5, t_2 = 8, t_3 = 3$$