CSE 451 Homework Assignment #4:
CPU Scheduling
Due Date: Thursday, November 4, in section

1. A CPU scheduling *workload* is the sequence of jobs that arrive for CPU time, when they arrive, and how much CPU time they need. (In other words, the CPU scheduling policy is a kind of an algorithm, and the workload is the input to the algorithm.) For each of the following CPU scheduling policies, describe the set of workloads under which that policy is optimal (does the same thing as shortest time to completion first) and the set of workloads under which the policy is pessimal (does the same thing as longest job first). If there are no workloads under which a policy is optimal or pessimal, indicate that.

(a) FIFO

(b) round robin

(c) shortest time to completion first with preemption

(d) multilevel feedback

(e) lottery scheduling where each job is assigned a number of lottery tickets inversely proportional to how much CPU time it has consumed since blocking