Basic Performance Evaluation

The enclosed files `Logger1.csv` and `Logger2.csv` are the same as the two columns in Example 1: they represent respectively the inter-arrival time between two requests to a server, and the service time required by each request. The value is expressed in minutes.

Consider an increase in the workload, that reduces the inter-arrival time of a fraction α, that is:

$$a'_i = \alpha \cdot a_i$$

- Which is the maximum arrival rate [expressed in jobs per minutes] that can be handled with an average response time of 20 minutes?

Consider now a fraction α that produces an arrival rate of 1.2 jobs per minute.

- Which should be the fraction β at which we must reduce the service time, i.e.

$$s'_i = \beta \cdot s_i$$

  so that the average response time is less than 15 minutes?