

CS-342 Project 2 Report

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- Average Waiting Time for Different avgPL Values

avgPL	minPL	maxPL	avgIAT	minIAT	maxIAT	Avg Waiting Time (ms)
100	10	1000	10	10	1000	470.5
200	10	1000	10	10	1000	974.4
300	10	1000	10	10	1000	1479.6
400	10	1000	10	10	1000	2030.5
500	10	1000	10	10	1000	2561.6
600	10	1000	10	10	1000	2854.5
700	10	1000	10	10	1000	3087.2
800	10	1000	10	10	1000	3405.3
900	10	1000	10	10	1000	3847.4
1000	10	1000	10	10	1000	4035.2

For this part only avgPL has been changed to see the effect of avgPL on the average waiting time. Other parameters were left the same. As it can be seen form the data, as the avgPL parameter increased the average waiting time also increased. As avgPL increase, each process spends more time at the CPU and thus each process waits the other processes for a longer period of time. Thus, waiting time of each process increase which leads to a higher average waiting time.

- Average Waiting Time for Different avgIAT Values

avgPL	minPL	maxPL	avgIAT	minIAT	maxIAT	Avg Waiting Time (ms)
10	10	1000	100	10	1000	12.5
10	10	1000	200	10	1000	10.2
10	10	1000	300	10	1000	4.0
10	10	1000	400	10	1000	2.5
10	10	1000	500	10	1000	2.1
10	10	1000	600	10	1000	1.7
10	10	1000	700	10	1000	1.4
10	10	1000	800	10	1000	0.9
10	10	1000	900	10	1000	0.5
10	10	1000	1000	10	1000	0.2

For this part only avgIAT has been changed to see the effect of avgIAT on the average waiting time. Other parameters were left the same. As it can be seen form the data, as the avgIAT parameter increased the average waiting time decreased. As avgIAT increase processes arrive less frequently. Thus, processes get more time in the cpu before the arrival of another process and each process completes its process time earlier. This leads to a lower average waiting time.