

Q1) a) KL-UCB:

Only 100 bandit instances were generated.

Average Time or sample complexity for 10 number of arms is 11529.16

Error rate in this case is 0.0

Average Time or sample complexity for 20 number of arms is 12616.62

Error rate in this case is 0.01

Average Time or sample complexity for 30 number of arms is 12310.98

Error rate in this case is 0.01

Average Time or sample complexity for 40 number of arms is 10827.57

Error rate in this case is 0.01

Average Time or sample complexity for 50 number of arms is 11856.81

Error rate in this case is 0.01

Q2) a) KL-UCB:

Average Time or sample complexity for 10 number of arms is 6490851.82

Error rate in this case is 0.0

Average Time or sample complexity for 15 number of arms is 6352044.08

Error rate in this case is 0.0

Average Time or sample complexity for 20 number of arms is 6313890.61

Error rate in this case is 0.0

Average Time or sample complexity for 25 number of arms is 6075266.2

Error rate in this case is 0.0

Average Time or sample complexity for 30 number of arms is 6100958.41

Error rate in this case is 0.01

b) lil'UCB:

Average Time or sample complexity for 10 number of arms is 199778.8

Error rate in this case is 0.0

Average Time or sample complexity for 15 number of arms is 414958.7

Error rate in this case is 0.0

Average Time or sample complexity for 20 number of arms is 641269.3

Error rate in this case is 0.0

Average Time or sample complexity for 25 number of arms is 867961.0

Error rate in this case is 0.0

Average Time or sample complexity for 30 number of arms is 1106042.3

Error rate in this case is 0.0

Please note log files reporting data for 10 trials is also attached in the txt files