Priya Diwakar
200205361
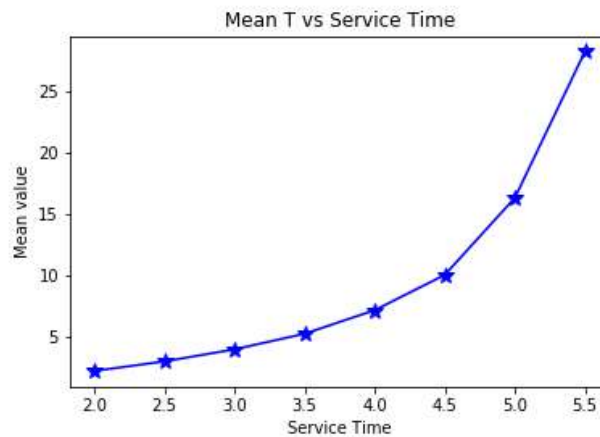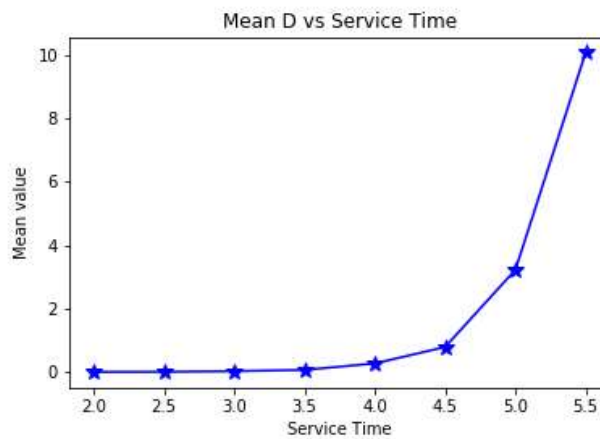
IOT Analytics Task 3

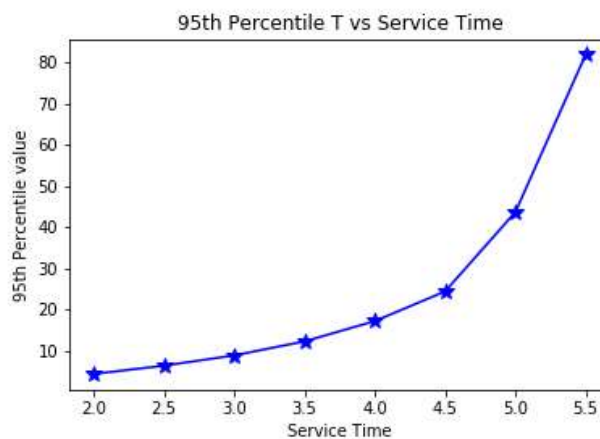**Part 1: Varying Service Time with values 2, 2.5, 3, 3.5, 4, 4.5, 5, 5.5**

Graphs

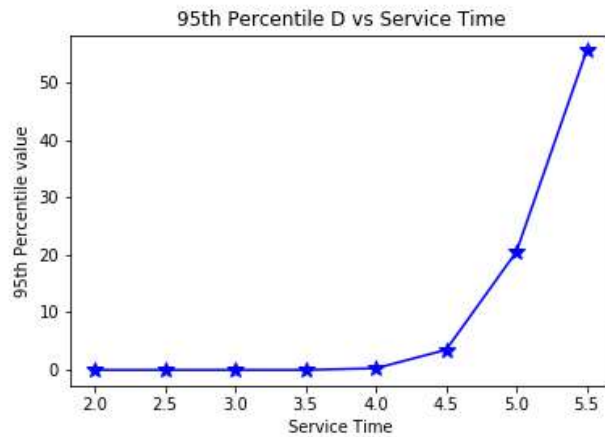   a.   Mean T: We observe that as service time increases mean value for T increases.

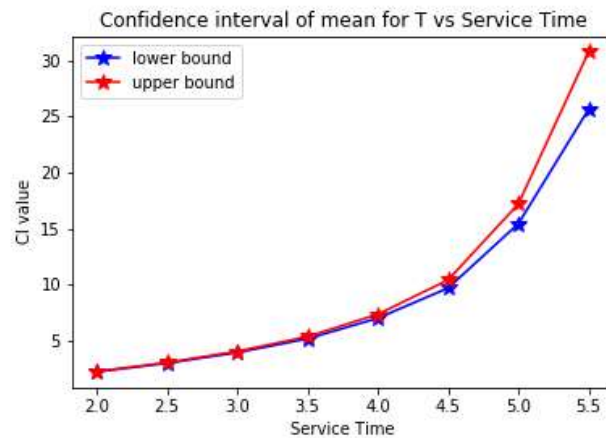   b.   Mean D: We observe that as service time increases mean value for D increases.

    c.   95th Percentile of T: We observe that as service time increases 95th Percentile value for T increases.
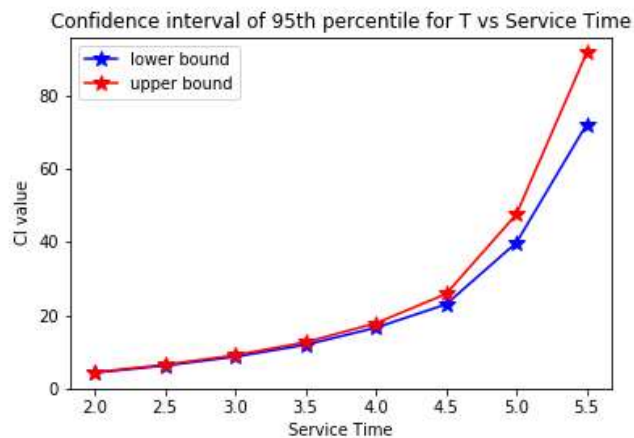
d. 95th Percentile of D: We observe that as service time increases 95th Percentile value for D increases.

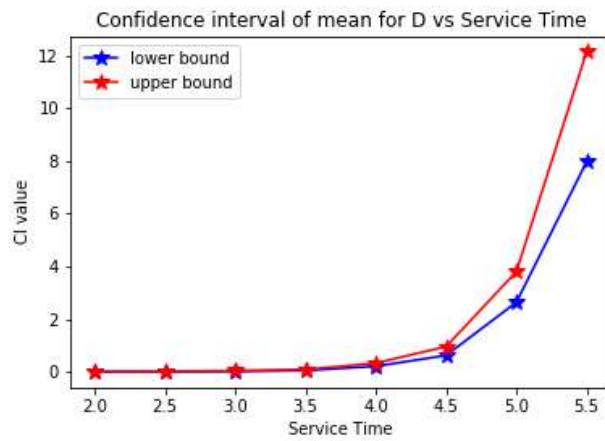95th Percentile D vs Service Time

e. Confidence Interval of Mean for T: We observe that as service time increases Confidence Interval of Mean for T increases.
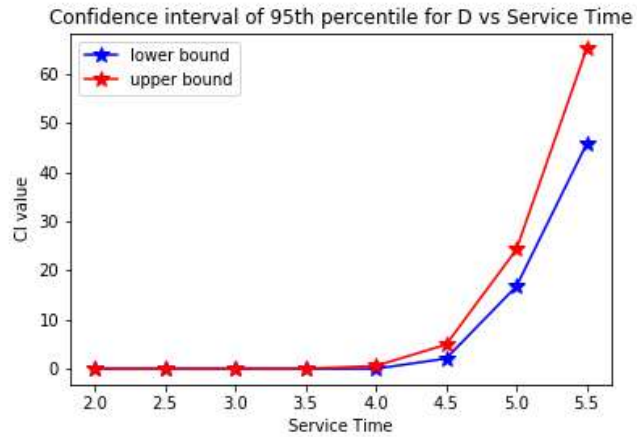
Confidence interval of mean for T vs Service Time

f. Confidence Interval of 95th Percentile for T: We observe that as service time increases Confidence Interval of 95th Percentile for T increases.

Confidence interval of 95th percentile for T vs Service Time

g. Confidence Interval of Mean for D: We observe that as service time increases Confidence Interval of Mean for D increases.
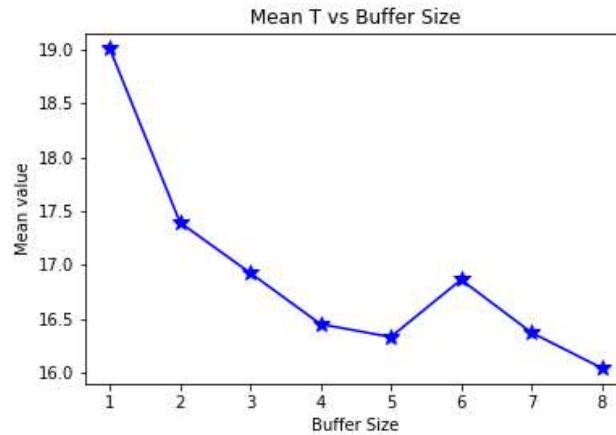

Confidence interval of mean for D vs Service Time

h. Confidence Interval of 95th Percentile for D: We observe that as service time increases Confidence Interval of 95th Percentile for D increases.

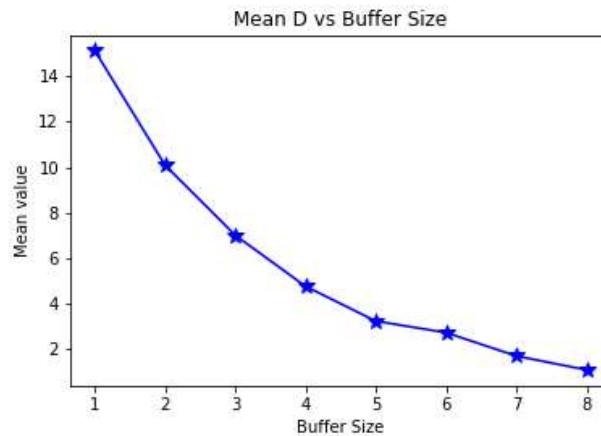Confidence interval of 95th percentile for D vs Service Time

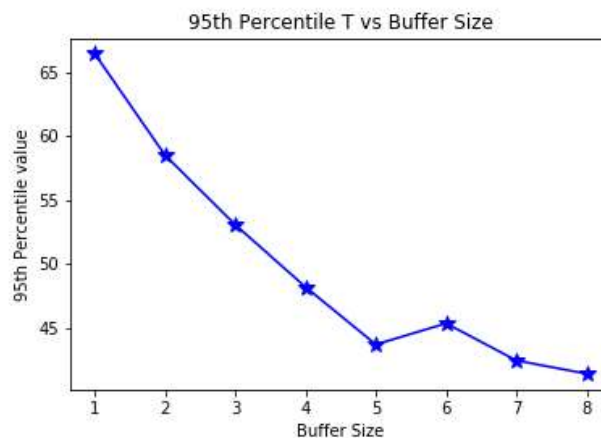**Part 2: Varying Buffer Size with values 1, 2, 3, 4, 5, 6, 7, 8**

    a.   Mean T: We observe that as buffer size increases mean value for T decreases though we observe a slight increase from size 5 to 6.
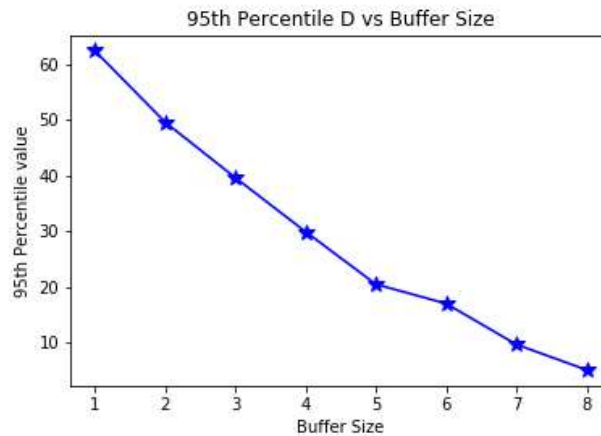

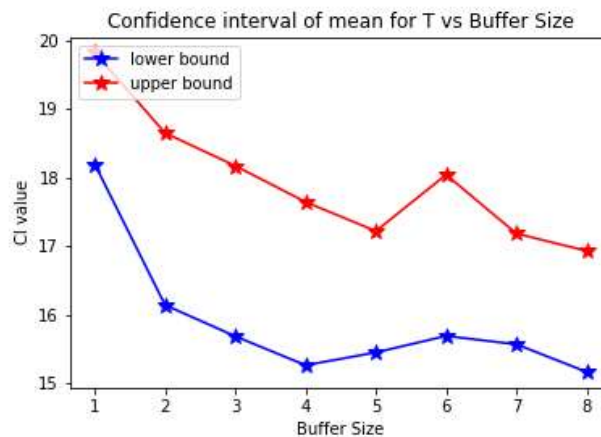   b.   Mean D: We observe that as buffer size increases mean value for D decreases.

    c.   95th Percentile of T: We observe that as buffer size increases 95th Percentile value for T decreases though we observe a slight increase from size 5 to 6.
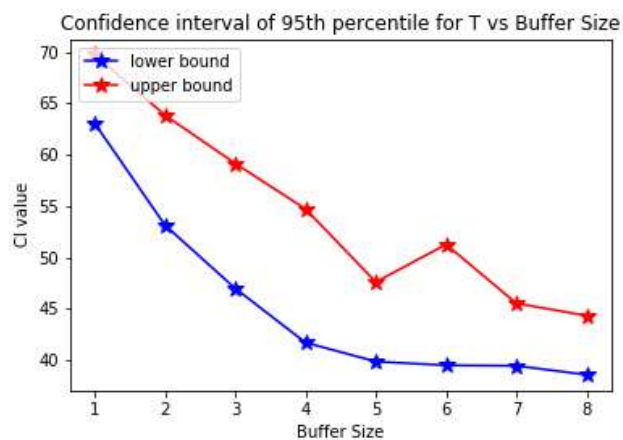
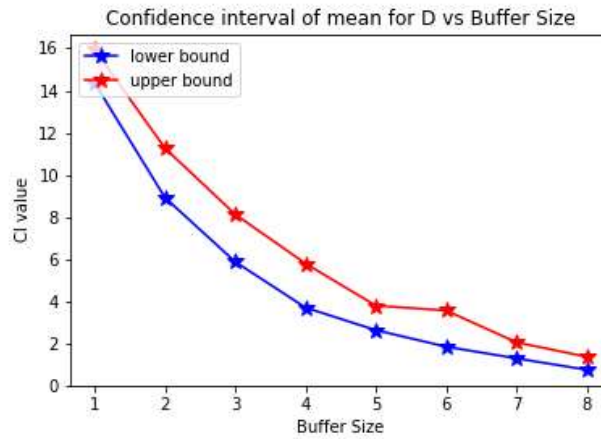d. 95th Percentile of D: We observe that as buffer size increases 95th Percentile value for D decreases.

95th Percentile D vs Buffer Size

e. Confidence Interval of Mean for T: We observe that as buffer size increases Confidence Interval of Mean for T decreases though we observe a slight increase from size 5 to 6 in the upper bound and increase from size 4 to 5 in lower bound.

Confidence interval of mean for T vs Buffer Size

f. Confidence Interval of 95th Percentile for T: We observe that as buffer size increases Confidence Interval of 95th Percentile for T decreases though we observe a slight increase from size 5 to 6 in the upper bound.

Confidence interval of 95th percentile for T vs Buffer Size

g. Confidence Interval of Mean for D: We observe that as buffer size increases Confidence Interval of Mean for D decreases though we observe a slight increase from size 5 to 6 in the upper bound.

Confidence interval of mean for D vs Buffer Size

h. Confidence Interval of 95th Percentile for D: We observe that as buffer size increases Confidence Interval of 95th Percentile for D decreases though we observe a slight increase from size 5 to 6 in the upper bound.

Confidence interval of 95th percentile for D vs Buffer Size