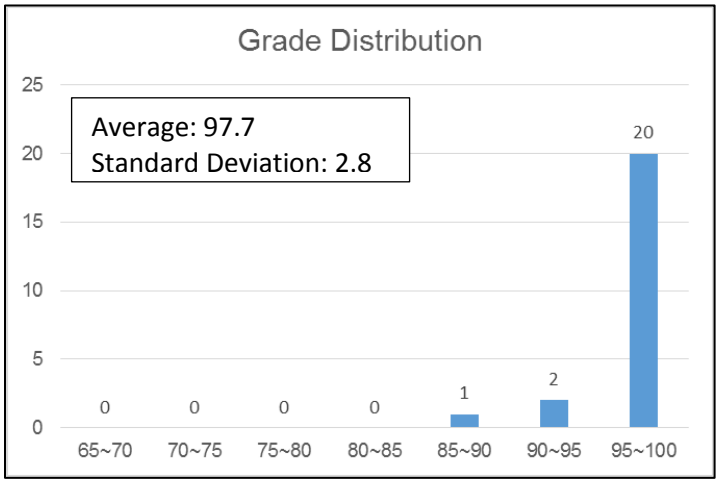
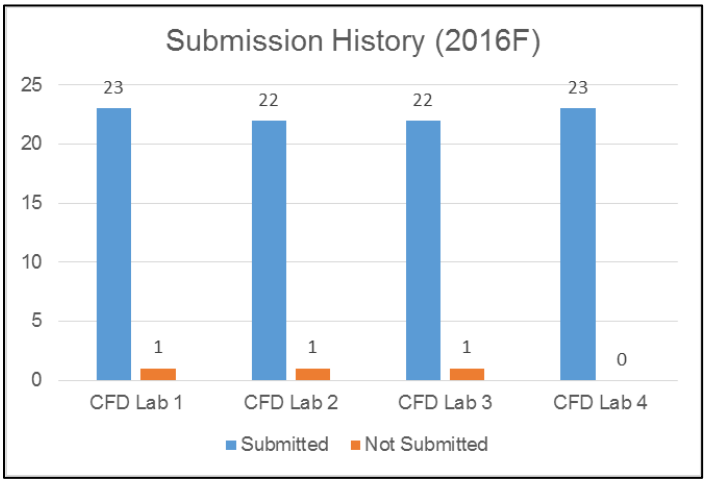
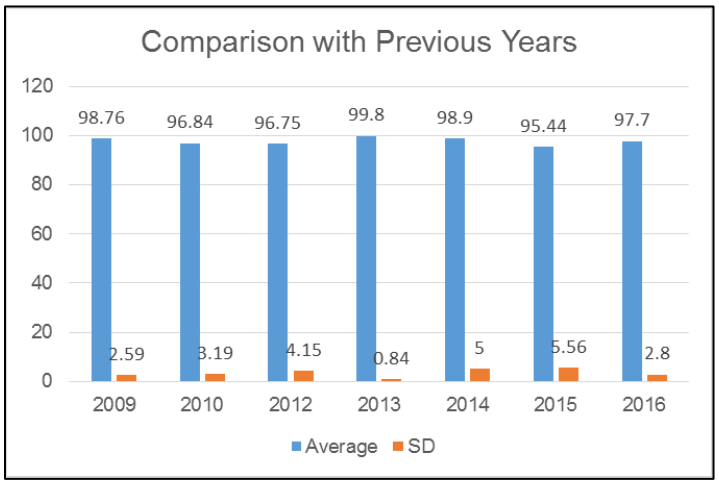
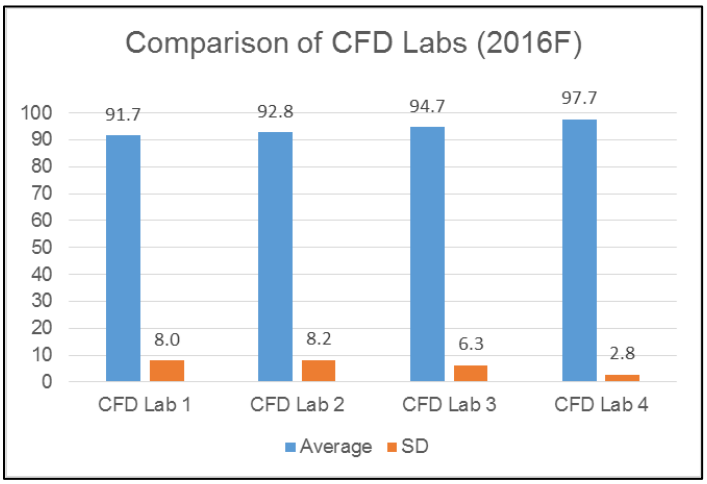
REPORT OF CFD LAB 4

	Number of Students
Total	**23**
Submitted	**23**
Not Submitted	**0**









1. Common Mistakes

a. Some students changed the sign of the C_k, which is calculated as negative from the program due to the high negative pressure value on the top curved part of the car. This might be the limit of our set-up. However, since we are projecting the force vector into (1,0,0) vector to get the drag for other parts too, we shouldn't change the sign of force for that specific part.
b. Some students didn't include the C_R (friction force coefficient) when they calculate the total drag coefficient
c. A couple of students didn't setup the correct ranges for streamlines

2. Feedback

a. Positive
   i. It was good to learn about unsteady flow
   ii. Could find out that unsteady flow requires more computational time
   iii. Could see the separation behind the ahmed car
   iv. Could know about the efficiency of CFD in flow where analytical solution and EFD doesn't work or expensive to produce
   v. Visualization could aid to show how the turbulence behaves behind the car
   vi. Generating video was a good experience
   vii. Was able to calculate Strouhal number

b. Negative
   i. Wording in visualization part wasn't good enough, so the correct setup wasn't showing up properly

3. Student's Suggestions

a. Running k-omega simulation would be nice to see if it improves the result since k-omega result was better in predicting separation for Lab 3
b. Changing slope angle, inlet velocity and mesh structure would be interesting things to study.