# What are Ensemble Learning Techniques?

**Average**
- Every Learner in the Ensemble scores each record separately. The Ensemble then averages all the scores together to create the final score.

- *Ex: A group of four students try to solve "2 + 2 = ?" Three of the students think the answer is 4, but the last student thinks the answer is 5... The group averages these scores and submits "4.25" as their answer.*

**Best**
- The Ensemble chooses the "Best" Learner based off of how the Learners did in training. This "Best" Learner is then the only one to score.

**Elite Average**
- A combination of Average and Best Ensemble; the Ensemble chooses the "Best/Elite" Learners based off of how the Learners did in training. First, the Learners get sorted by their training scores, then the top "n" Learners are chosen as the Elite Learners. These Elite Learners score each record separately and the Ensemble averages their scores.

- *Ex: Before students are given the test, a group of four students pull out their past semester homework and start comparing grades. They sort their total grades and the results are 95%, 94%, 82%, and 37%. They decide to choose the top two students among them to become their "Elite" students because their grades of 95% and 94% are close enough to each other, and they ignore the other two students. They are handed the test and try to solve "2 + 2 = ?" Both of the "Elite" students think the answer is 4, they average the scores and submit "4" as their answer.*

**Soloist**
- "An Ensemble of ONE" It is an Ensemble only in name. Much like a teacher telling her students to get into groups of 1, they might be called "groups/Ensembles" but they function identically to a single "student/Learner."