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**AGRO-932 Spring 2020**

**HW3 (100 points)**

1. **Establish a version-controlled directory system to host the homework3.**

<https://github.com/spalalidelen2/agro932-lab/blob/master/profiling/HW3/HW3_Loblolly-pine-data.Rmd>

1. **Place the following system of equations in matrix form and solve it using R.**

5 X1 + 6 X2 = 3

3 X1 - 4 X2 = -6

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Description automatically generated

1. **Using the Loblolly pine data as shown in the lab13, choose the phenotype of “root number data at age 10” (i.e., DATA\_rootnum\_age10\_rootnum.csv) and then conduct genomic selection using both GBLUP and RR-BLUP methods with 10-fold cross-validation.**

The codes are worked in the Rmd.

1. **Visualize the prediction accuracy results using the box plot or violin plot.**