Batch effect adjustment methods

1. Singular value decomposition  
   Adjust the data by filtering out those eigengenes that are inferred to represent noise or experimental artifacts.
2. Distance weighted discrimination  
   Find a separating hyperplane between the two batches, and adjusting the data by projecting the different batches on the DWD plane, finding the batch mean, and then subtracting out the DWD plane multiplied by this mean.
3. Model based location/scale adjustments.  
   One straightforward L/S batch adjustment is to mean center and standardize the variance of each batch for each gene independently.
4. Empirical Bayes method for adjusting batch effect