1. Code Attached
2.

Method	Training NDCG@10 score	Training time in minutes
RankBoost	0.4284	1m32.852s
Coordinate Ascent	0.4603	6m28.063s
LambdaMART	0.5296	0m27.487s
Random Forests	0.5592	3m35.510s

3.

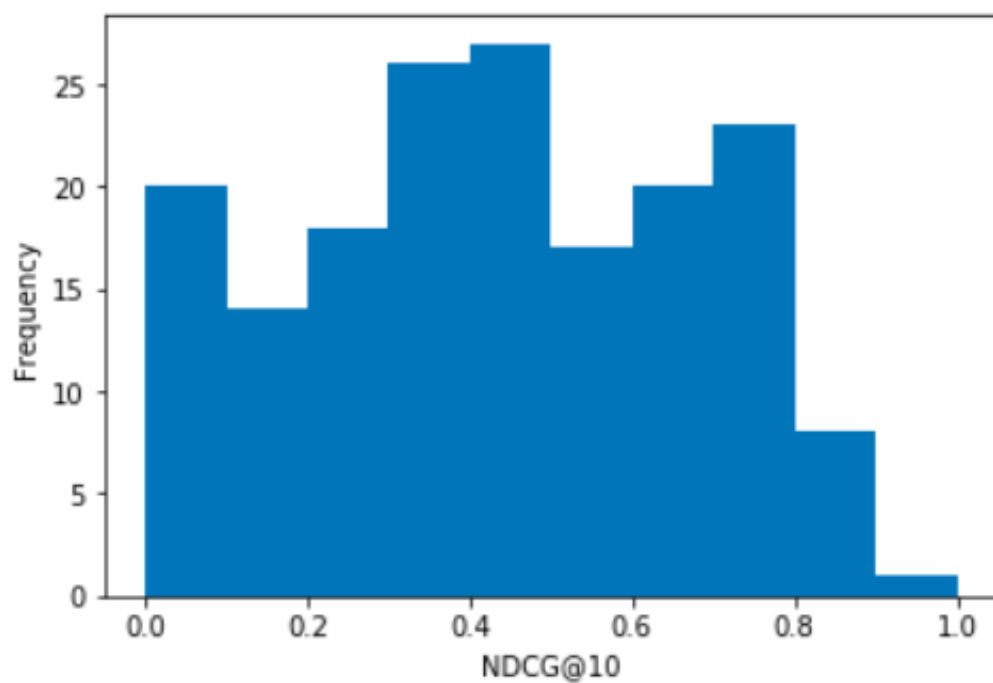| Method	Testing NDCG@10 score	Testing ERR@10 score
RankBoost	0.3594	0.1824
Coordinate Ascent	0.415	0.2322
LambdaMART	0.4278	0.243
Random Forests	0.4339	0.2363

Random Forests is the winner among 4 LETOR methods.
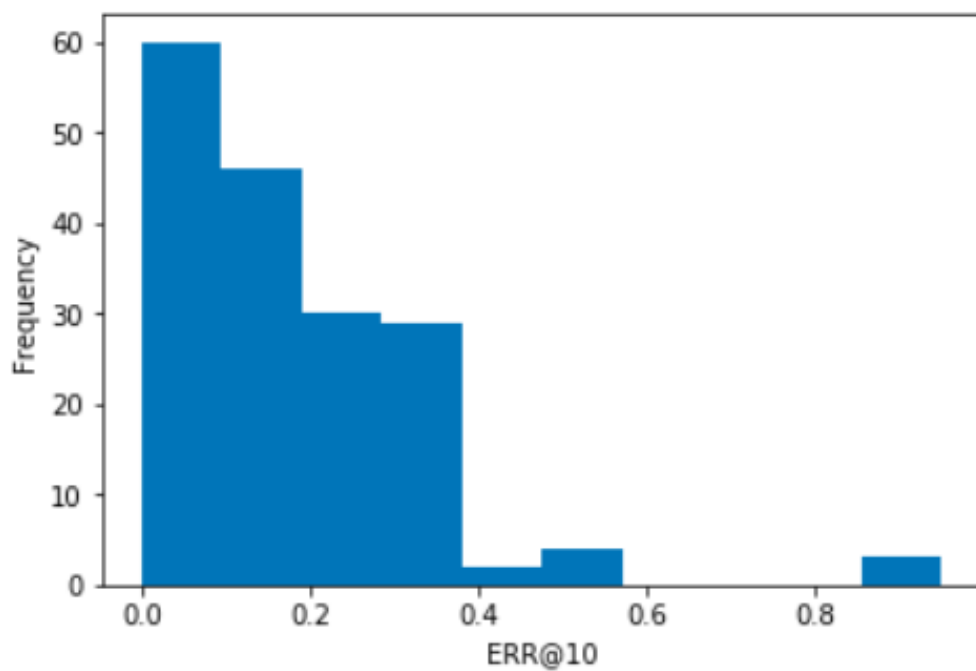
4.Histogram(Code Attached)

RankBoost

NDCG@10
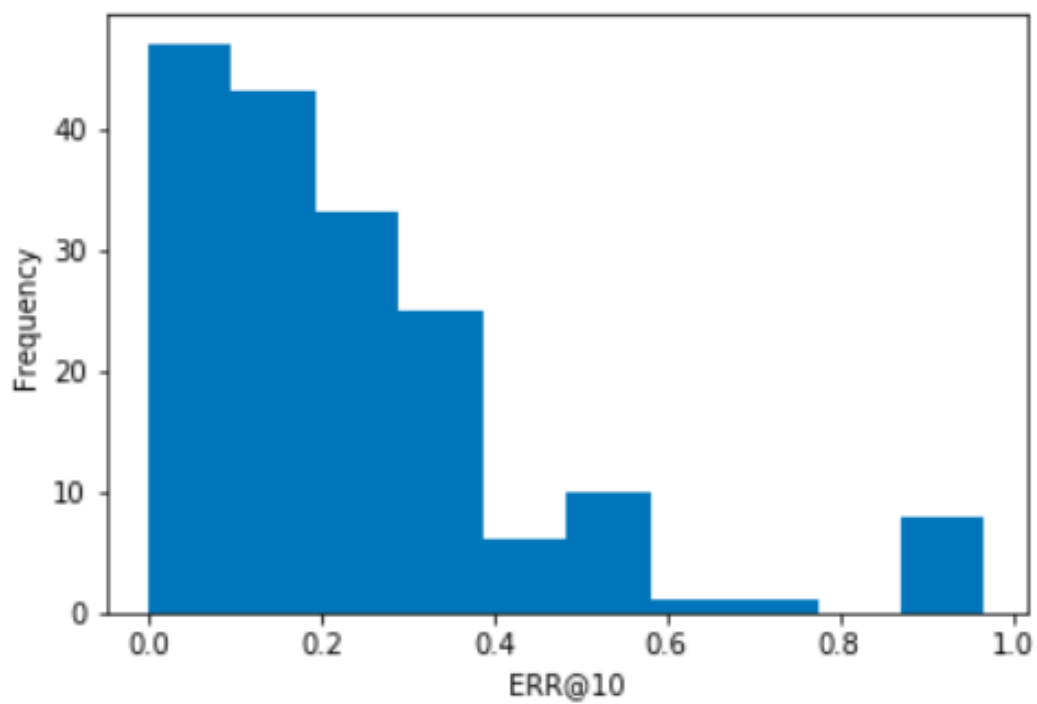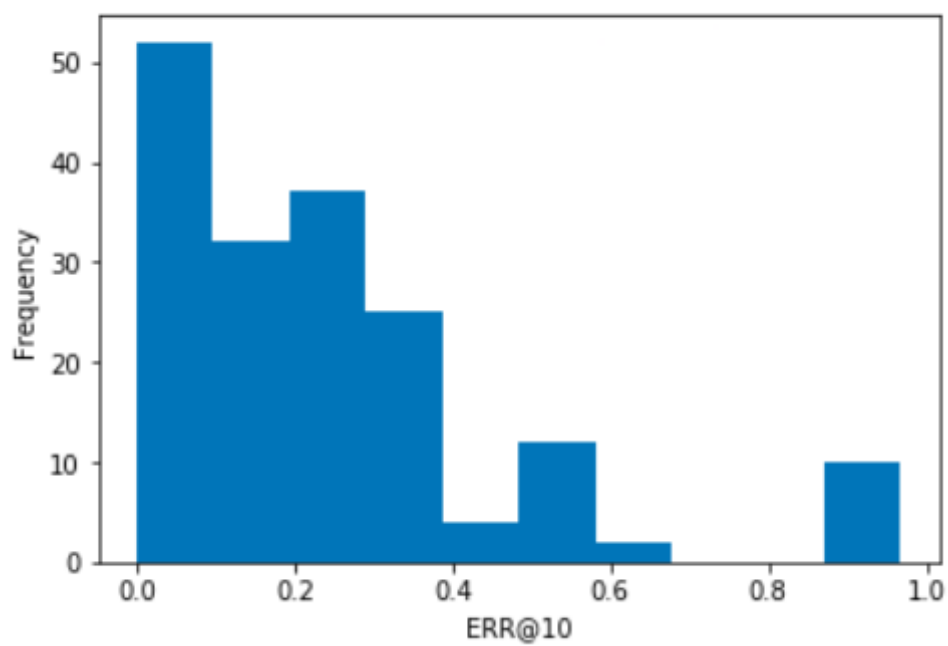
CoordinateAscent

NDCG@10
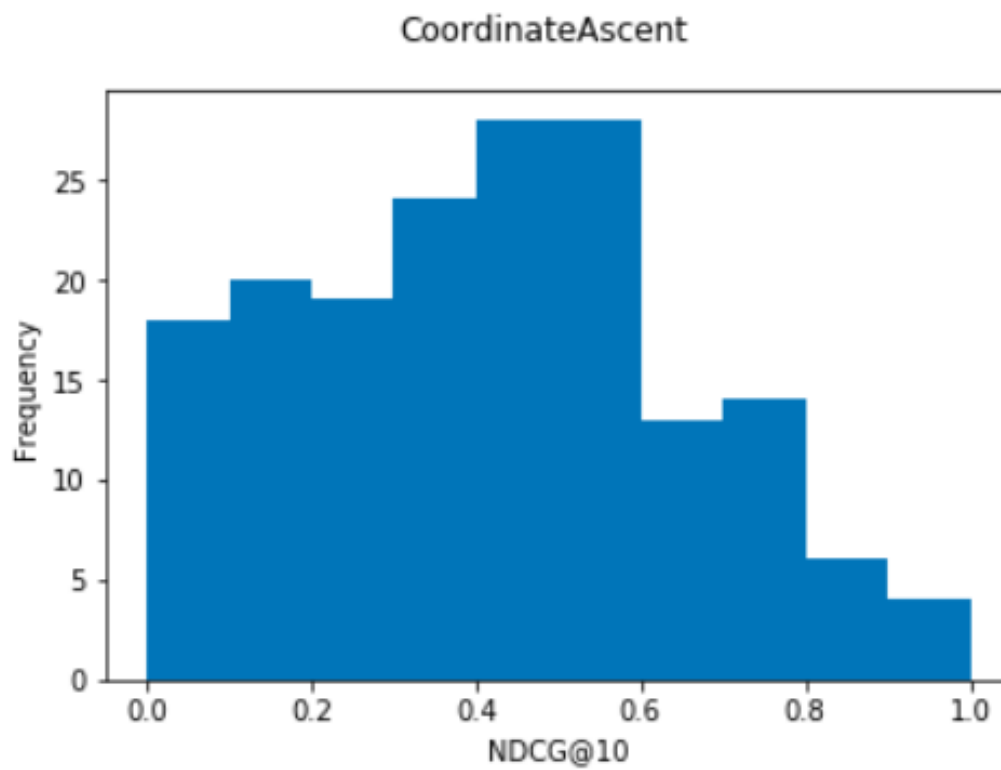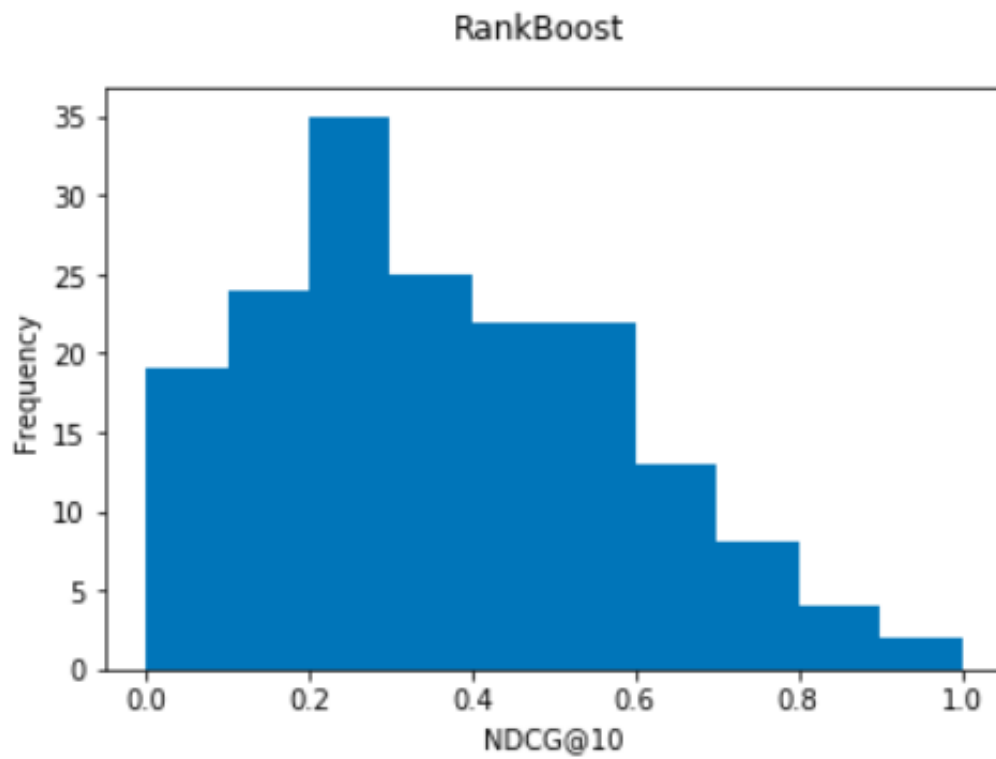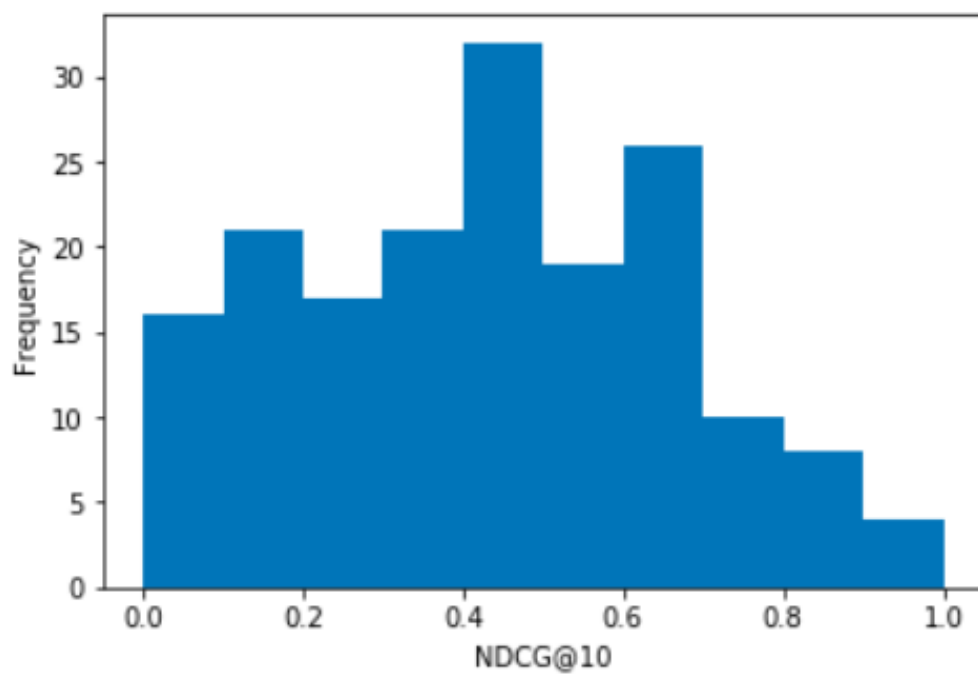
LambdaMART

RandomForest

RankBoost

CoordinateAscent

LambdaMART

RandomForest