Collaborative Filtering Assignment 1 Report

MAE values for User Based recommender system

| | K = 10 | K = 20 | K = 30 | K = 40 | K = 50 |
|---------|-----------|-----------|-----------|-----------|-----------|
| Fold 1 | 0.7802590 | 0.7619369 | 0.7543041 | 0.7502231 | 0.7467420 |
| Fold 2 | 0.7794262 | 0.7599151 | 0.7524850 | 0.7478404 | 0.7455421 |
| Fold 3 | 0.7787919 | 0.7609632 | 0.7537163 | 0.7498035 | 0.7473436 |
| Fold 4 | 0.7797772 | 0.7614720 | 0.7543832 | 0.7498325 | 0.7461552 |
| Fold 5 | 0.7807813 | 0.7616671 | 0.7544579 | 0.7497218 | 0.7467306 |
| Average | 0.7798071 | 0.7611908 | 0.7538693 | 0.7494842 | 0.7465027 |

MAE values for Item Based recommender system

| | K = 10 | K = 20 | K = 30 | K = 40 | K = 50 |
|---------|-----------|-----------|-----------|-----------|-----------|
| Fold 1 | 0.7755680 | 0.7565263 | 0.7491348 | 0.7450223 | 0.7424647 |
| Fold 2 | 0.7743432 | 0.7572572 | 0.7493978 | 0.7457419 | 0.7430728 |
| Fold 3 | 0.7766868 | 0.7575688 | 0.7501486 | 0.7452022 | 0.7427293 |
| Fold 4 | 0.7783033 | 0.7565815 | 0.7479332 | 0.7448692 | 0.7430649 |
| Fold 5 | 0.7759800 | 0.7577544 | 0.7497850 | 0.7459569 | 0.7433626 |
| Average | 0.7761762 | 0.7571376 | 0.7492798 | 0.7453585 | 0.7429388 |