Name: Shoumik Lodh Roll No: 2020407

USER BASED:

	k=10	k=20	k=30	k=40	k=50
Fold1	0.29734	0.30856	0.31515	0.31875	0.32222
Fold2	0.34373	0.35386	0.36128	0.36618	0.37070
Fold3	0.32436	0.33555	0.34089	0.34562	0.34793
Fold4	0.28295	0.29242	0.29821	0.30361	0.30823
Fold5	0.29839	0.30973	0.31694	0.32122	0.32450
Average	0.30935	0.32003	0.32650	0.33108	0.33472

ITEM BASED:

```
Item-based, K=10: MAE = 0.33855964826421625
Item-based, K=20: MAE = 0.36390399051353994
Item-based, K=30: MAE = 0.37847524046642855
Item-based, K=40: MAE = 0.3905701801381716
Item-based, K=50: MAE = 0.40048567828489945
Item-based, K=10: MAE = 0.3252802641647688
Item-based, K=20: MAE = 0.34318986985368033
Item-based, K=30: MAE = 0.3587372471927175
Item-based, K=40: MAE = 0.3710299899014482
Item-based, K=50: MAE = 0.3815374772493215
Item-based, K=10: MAE = 0.3362231456609612
Item-based, K=20: MAE = 0.3593339695417714
Item-based, K=30: MAE = 0.3742224005606814
Item-based, K=40: MAE = 0.3854458731280894
Item-based, K=50: MAE = 0.395455939810271
Item-based. K=10: MAE = 0.33018653066381926
Item-based, K=20: MAE = 0.3541543319670283
Item-based, K=30: MAE = 0.369442981868804
Item-based, K=40: MAE = 0.38085926589657454
Item-based, K=50: MAE = 0.391769067017803
Item-based, K=10: MAE = 0.295312337980008
Item-based, K=20: MAE = 0.3211411113047381
Item-based, K=30: MAE = 0.3353391801050172
Item-based, K=40: MAE = 0.3478448225994792
Item-based, K=50: MAE = 0.3594079209596157
```

SIGNIFICANCE WEIGHTING:

```
F K=10: MAE = 0.8657903797496672
   K=20: MAE = 0.8657699039852689
    K=30: MAE = 0.8657716438676593
   K=40: MAE = 0.8657850942164558
    K=50: MAE = 0.8657983463711376
   K=10: MAE = 0.8650776688517012
   K=20: MAE = 0.8650609291081433
   K=30: MAE = 0.8650744108484798
   K=40: MAE = 0.8650931067310748
   K=50: MAE = 0.8651102218745341
    K=10: MAE = 0.8638086201403885
   K=20: MAE = 0.8637808402533087
   K=30: MAE = 0.863790440936903
    K=40: MAE = 0.8638098883208987
   K=50: MAE = 0.8638283134734186
   K=10: MAE = 0.8608957558710181
    K=20: MAE = 0.8608897704068438
   K=30: MAE = 0.8608952670724076
   K=40: MAE = 0.8609019930266457
    K=50: MAE = 0.860913223755871
   K=10: MAE = 0.8636548146942656
   K=20: MAE = 0.8636411916094796
    K=30: MAE = 0.8636439562166206
   K=40: MAE = 0.8636568423860118
   K=50: MAE = 0.86367198354634
   Overall, K=10: MAE = 0.8638454478614082 ± 0.001675679488596043
    Overall, K=20: MAE = 0.8638285270726088 ± 0.0016710127733358681
    Overall, K=30: MAE = 0.863835143788414 ± 0.0016713612141568363
    Overall, K=40: MAE = 0.8638493849362174 ± 0.0016744889372864837
    Overall, K=50: MAE = 0.8638644178042604 ± 0.0016757081047050154
```

VARIANCE WEIGHTING

```
T Item-based, K=10: MAE = 0.2368568967550279
    Item-based, K=20: MAE = 0.2368674558426822
    Item-based, K=30: MAE = 0.23686952936924302
    Item-based, K=40: MAE = 0.2368695510442479
    Item-based, K=50: MAE = 0.2369003728722197
    Item-based, K=10: MAE = 0.22839212691039162
    Item-based, K=20: MAE = 0.22839329172370026
    Item-based, K=30: MAE = 0.2283954073441747
    Item-based, K=40: MAE = 0.22839543279814936
    Item-based, K=50: MAE = 0.22839546835772673
    Item-based, K=10: MAE = 0.21941793993802597
    Item-based, K=20: MAE = 0.2194231560475809
    Item-based, K=30: MAE = 0.219423840783552
    Item-based, K=40: MAE = 0.21942387053180706
    Item-based, K=50: MAE = 0.2194239024781477
    Item-based, K=10: MAE = 0.23287347793927624
    Item-based, K=20: MAE = 0.2328799512099521
    Item-based, K=30: MAE = 0.23288139640368072
    Item-based, K=40: MAE = 0.23288142248250085
    Item-based, K=50: MAE = 0.23288146686648345
    Item-based, K=10: MAE = 0.19509044199386796
    Item-based, K=20: MAE = 0.19509889399746355
    Item-based, K=30: MAE = 0.19509987326347233
    Item-based, K=40: MAE = 0.19509989365399671
    Item-based, K=50: MAE = 0.19509992842711807
```