Experiment Design for Data Science – Exercise 2
Group 13

GitHub repositories used:

"Collaborative Memory Network for Recommendation Systems" (SIGIR 18):
https://github.com/tebesu/CollaborativeMemoryNetwork

"Are We Really Making Much Progress? A Worrying Analysis of Recent Neural Recommendation Approaches" (RecSys 19):
https://github.com/MaurizioFD/RecSys2019_DeepLearning_Evaluation

Python packages versions:
Used the requirement.txt file from the second GitHub repository

Commands executed:

Pre-train the data:
Citeulike dataset:
```
python pretrain.py --gpu 0 --dataset data/citeulike-a.npz --output
pretrain/citeulike-a_eX.npz –e X
```
For X in [20,40,50,60,80,100]

Epinions dataset:
```
python pretrain.py --gpu 0 --dataset data/epinions.npz --output
pretrain/epinions_e50.npz
```

Variation of number of hops:
```
python train.py --gpu 0 --dataset data/citeulike-a.npz --pretrain
pretrain/citeulike-a_e50.npz --hops H
```
For H in [1,2,3]

Comparison to ItemKNN:
```
python run_SIGIR_18_CMN.py –b True –a True –p True
```

Variation of embedding sizes:
```
python train.py --gpu 0 --dataset data/citeulike-a.npz --pretrain
pretrain/citeulike-a_eX.npz --hops H –e X
```
For H in [1,2,3] and X in [20,40,50,60,80,100]

Variation of number of negative samples:
```
python train.py --gpu 0 --dataset data/citeulike-a.npz --pretrain
pretrain/citeulike-a_e50.npz --hops H --neg N
```
For H in [1,2,3] and N in [2,3,4,5,6,7,8,9,10]