

Find the deals in the BestBuy_Deal tweets that match products in SmartPortables MySQL product table ¶

```
In [66]: import re
import pymysql

cnx = pymysql.connect(user='root', password='Hjx960729!',
                      host='127.0.0.1',
                      database='exampledatabase')

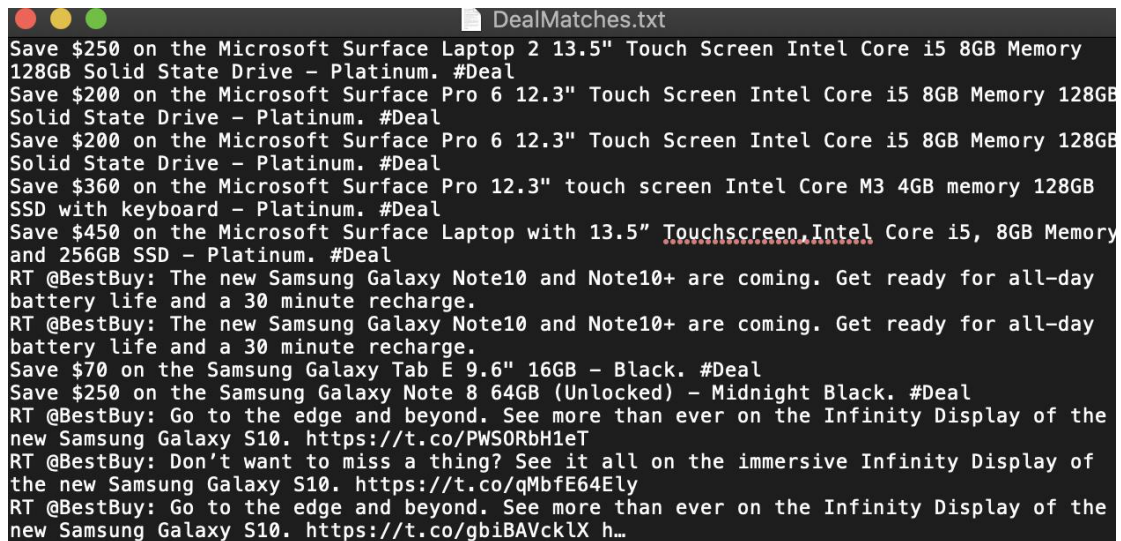
cursor = cnx.cursor()

query = ("SELECT id FROM ProductDetails")
cursor.execute(query)

dealMatchGauranteed=[]
for product in cursor:
    for tweet in timeline:
        deal = (tweet['text'])
        if (len(re.findall('\s'+product[0]+'\\s',deal)) >= 1):
            dealMatchGauranteed = dealMatchGauranteed + [deal]
```

```
In [67]: # Sanity Test that we got some deals
dealMatchGauranteed[:5]
```

```
Out[67]: ['Save $250 on the Microsoft Surface Laptop 2 13.5" Touch Screen Intel Core i5 8GB Memory 128GB Solid State Drive - P
latinum. #Deal',
'Save $200 on the Microsoft Surface Pro 6 12.3" Touch Screen Intel Core i5 8GB Memory 128GB Solid State Drive - Plat
inum. #Deal',
'Save $200 on the Microsoft Surface Pro 6 12.3" Touch Screen Intel Core i5 8GB Memory 128GB Solid State Drive - Plat
inum. #Deal',
'Save $360 on the Microsoft Surface Pro 12.3" touch screen Intel Core M3 4GB memory 128GB SSD with keyboard - Platinu
m. #Deal',
'Save $450 on the Microsoft Surface Laptop with 13.5" Touchscreen, Intel Core i5, 8GB Memory and 256GB SSD - Platinu
m. #Deal']
```



```
DealMatches.txt
Save $250 on the Microsoft Surface Laptop 2 13.5" Touch Screen Intel Core i5 8GB Memory
128GB Solid State Drive - Platinum. #Deal
Save $200 on the Microsoft Surface Pro 6 12.3" Touch Screen Intel Core i5 8GB Memory 128GB
Solid State Drive - Platinum. #Deal
Save $200 on the Microsoft Surface Pro 6 12.3" Touch Screen Intel Core i5 8GB Memory 128GB
Solid State Drive - Platinum. #Deal
Save $360 on the Microsoft Surface Pro 12.3" touch screen Intel Core M3 4GB memory 128GB
SSD with keyboard - Platinum. #Deal
Save $450 on the Microsoft Surface Laptop with 13.5" Touchscreen, Intel Core i5, 8GB Memory
and 256GB SSD - Platinum. #Deal
RT @BestBuy: The new Samsung Galaxy Note10 and Note10+ are coming. Get ready for all-day
battery life and a 30 minute recharge.
RT @BestBuy: The new Samsung Galaxy Note10 and Note10+ are coming. Get ready for all-day
battery life and a 30 minute recharge.
Save $70 on the Samsung Galaxy Tab E 9.6" 16GB - Black. #Deal
Save $250 on the Samsung Galaxy Note 8 64GB (Unlocked) - Midnight Black. #Deal
RT @BestBuy: Go to the edge and beyond. See more than ever on the Infinity Display of the
new Samsung Galaxy S10. https://t.co/PWS0RbH1eT
RT @BestBuy: Don't want to miss a thing? See it all on the immersive Infinity Display of
the new Samsung Galaxy S10. https://t.co/qMbF64Ely
RT @BestBuy: Go to the edge and beyond. See more than ever on the Infinity Display of the
new Samsung Galaxy S10. https://t.co/gbiBAVcklX h...
```

- beFree Sound
- Bose
- Logitech
- GPX
- PoppinPodKolo

Phones

- Apple
- Samsung
- Motorola
- Pixel
- Honor

LapTops

- Apple
- HP
- Surface
- Samsung
- Dell

Voice Assistant


Online shopping from a great selection at BEST DEAL

RT @BestBuy: The new Samsung Galaxy Note10 and Note10+ are coming. Get ready for all-day battery life and a 30 minute recharge.

Save \$200 on the Microsoft Surface Pro 6 12.3" Touch Screen Intel Core i5 8GB Memory 128GB Solid State Drive - Platinum. #Deal

Deal Matches

Samsung Galaxy
1059.0\$




Buy Now

WriteReview

ViewReview

Microsoft Surface
1089.0\$



Mouse sold separately

Buy Now

WriteReview

ViewReview

Trending

TV

- Sony
- TCL
- LG
- Samsung
- Sceptre


SoundSystems

- beFree Sound
- Bose
- Logitech
- GPX
- PoppinPodKolo

Phones

- Apple

Welcome to Best Deal



Online shopping from a great selection at BEST DEAL

No Offers Found

Deal Matches

No Deals Found

```
# Than predict ratings for all pairs (u, i) that are NOT in the training set.
testset = trainset.build_anti_testset()
predictions = algo.test(testset)

top_n = get_top_n(predictions, n=3)


# Print the recommended items for each user
for uid, user_ratings in top_n.items():
    print(uid, [iid for (iid, _) in user_ratings])

out = open(pr_file_path+'/matrixFactorizationBasedRecommendations.csv', 'w', newline='')
output=csv.writer(out)

for uid, user_ratings in top_n.items():
    output.writerow([uid, [iid for (iid, _) in user_ratings]])
out.close()

123 ['Logitech Z906', 'MacBook Pro', 'iphone11']
qq ['iphone11', 'MacBook Pro', 'TCL 65R625']
Tom ['Oculus Rift S', 'Bose Home', 'TCL 49NANO85UNA']
l ['TCL 65R625', 'HP', 'iphoneXR']
tim ['HP', 'Sony KDL32W600D', 'Honor 8A']
```

User:123



Best Deal

Great Savings. Every Day.

[Home](#)
[TV](#)
[SoundSystems](#)
[Phones](#)
[Laptops](#)
[VoiceAssistant](#)
[WearableTechnology](#)

Hello, 123
Account
Logout
Cart(1)

Trending

TV

- Sony
- TCL
- LG
- Samsung
- Sceptre

SoundSystems

- beFree Sound
- Bose
- Logitech
- GPX
- PoppinPodKolo

Cart(1)

1	iphoneXR	499.99	Remove
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Total: 499.99

CheckOut

Recommended Products

MacBook Pro

2149.08




Buy Now

WriteReview

ViewReview

iphone11

759.99\$



Buy Now

WriteReview

ViewReview

Recommended Products

Logitech Z906
498.0\$



Buy Now

WriteReview

ViewReview

MacBook Pro
2149.0\$



Buy Now

WriteReview

ViewReview

User:Tom

TVSoundSystemsPhonesLaptopsVoiceAssistantWearableTechnology

Hello, TomAccountLogoutCart(1)

Trending

TV

Sony

TCL

LG

Samsung

Sceptre

SoundSystems

beFree Sound

Bose

Logitech

GPX

PoppinPodKolo

Cart(1)


1	HP	759.0	Remove
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Total: 759.0

Checkout

Recommended Products

Oculus Rift S
399.0\$




Buy Now

WriteReview

ViewReview

Bose Home
79.99\$



Buy Now

WriteReview

ViewReview

User:Tim

Great Savings. Every Day.

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Trending

TV

- Sony
- TCL
- LG
- Samsung
- Sceptre

SoundSystems

- beFree Sound
- Bose
- Logitech
- GPX
- PoppinPodKolo

Cart(1)

1

iphoneXR

499.99

Remove


Total: 499.99

CheckOut

Recommended Products

Sony KDL32W600D

298.08




Buy Now

WriteReview

ViewReview

Honor 8A

106.988



Buy Now

WriteReview

ViewReview

Class Crystal	Class Crystal	tvs	Samsung	1	6939	homedelivery	60616	Disputed	Yes	Yes
iphoneXR	iphoneXR	phones	Apple	5	6442	homedelivery	60612	Approved	No	Yes
Samsung Bixby	Samsung Bixby	phones	Samsung Bixby	4	7615	storepickup	60616	Disputed	Yes	Yes
iphone11	iphone11	phones	Apple	5	2625	homedelivery	60616	Approved	No	Yes
Logitech Z906	Logitech Z906	soundsystems	Logitech	5	5319	storepickup	60616	Approved	No	Yes
Bose Home	Bose Home	voice assistants	Bose Home	5	9998	homedelivery	60616	Approved	No	Yes
ihome	ihome	voice assistants	iHome Google	3	1490	storepickup	60616	Approved	No	Yes
TCL 49NANO85UNA	TCL 49NANO85UNA	tvs	TCL	4	9251	storepickup	60616	Approved	No	Yes
PoppinPod Kolo	PoppinPod Kolo	soundsystems	PoppinPodKolo	5	1140	homedelivery	60612	Approved	No	Yes
TLG 55UN7300PUF	TLG 55UN7300PUF	laptops	Microsoft	5	7367	homedelivery	60616	Approved	No	Yes
FitBark GPS Dog T...	FitBark GPS Dog T...	wearable technologys	PetTracker	5	9626	storepickup	60616	Disputed	Yes	Yes
Class Crystal	Class Crystal	tvs	Samsung	1	5681	homedelivery	60612	Approved	No	Yes
Sony X750H	Sony X750H	tvs	Sony	3	2741	homedelivery	60616	Approved	No	Yes
iphone11	iphone11	phones	Apple	5	8321	storepickup	60616	Approved	No	Yes
Logitech Z906	Logitech Z906	Logitech	Logitech	5	7979	homedelivery	60616	Approved	No	Yes
Echo Dot	Echo Dot	voice assistants	Echo Dot	11	9842	storepickup	60616	Disputed	Yes	Yes
Oculus Rift S	Oculus Rift S	wearable technologys	Virtual Reality	5	5766	homedelivery	60612	Approved	No	Yes
Sony KDL32W600D	Sony KDL32W600D	tvs	Sony	5	4439	homedelivery	60616	Approved	No	Yes
BFS-99X	BFS-99X	soundsystems	beFree Sound	2	4538	homedelivery	60616	Approved	No	Yes
Bose Home	Bose Home	voice assistants	Bose Home	5	1151	storepickup	60616	Disputed	Yes	Yes
FitBark GPS Dog T...	FitBark GPS Dog T...	wearable technologys	PetTracker	5	7764	homedelivery	60616	Approved	No	Yes
Microsoft Surface	Microsoft Surface	laptops	Surface	1	46	storepickup	60612	Approved	No	Yes
iphone11	iphone11	phones	Apple	5	9325	homedelivery	60616	Approved	No	Yes
TCL 65R625	TCL 65R625	tvs	TCL	5	6967	homedelivery	60616	Approved	No	Yes
Samsung Bixby	Samsung Bixby	voice assistants	Samsung Bixby	4	4453	storepickup	60616	Disputed	Yes	Yes
HP	HP	laptops	HP	5	4602	homedelivery	60616	Approved	No	Yes