

• Databases

```
C:\Program Files\MongoDB\Server\3.2\bin\mongo.exe
> use reviews;
> db.myReviews.find()
{"_id": "ObjectID('5f818ca708c4834ae8225a29')", "title": "myReviews", "product_id": "home_mini", "product_name": "home mini", "product_category": "voice assistant", "product_price": "39.99", "store_id": "1", "store_zip": "1905", "store_city": "Lynn", "store_state": "MA", "product_onsale": "yes", "manufacturer_name": "google", "manufacturer_rebate": "10.0", "user_id": "yash1", "user_age": "24", "user_gender": "M", "user_occupation": "student", "review_rating": "1", "review_date": "10-09-2020", "review_text": "abc"}, {"_id": "ObjectID('5f818cd508c4834ae8225a2b')", "title": "myReviews", "product_id": "home_mini", "product_name": "home mini", "product_category": "voice assistant", "product_price": "39.99", "store_id": "1", "store_zip": "51701", "store_city": "Madison", "store_state": "WI", "product_onsale": "yes", "manufacturer_name": "google", "manufacturer_rebate": "10.0", "user_id": "yash1", "user_age": "30", "user_gender": "M", "user_occupation": "developer", "review_rating": "4", "review_date": "10-09-2020", "review_text": "xyz"}, {"_id": "ObjectID('5f812fa08c4834ae8225a3f')", "title": "myReviews", "product_id": "wh 1000bms", "product_name": "wh 1000bms", "product_category": "headphone", "product_price": "399.99", "store_id": "1", "store_zip": "6801", "store_city": "Avon", "store_state": "CT", "product_onsale": "yes", "manufacturer_name": "sony", "manufacturer_rebate": "30.0", "user_id": "yash1", "user_age": "24", "user_gender": "M", "user_occupation": "student", "review_rating": "1", "review_date": "10-09-2020", "review_text": "good"}, {"_id": "ObjectID('5f821bf608c4833bec531da8')", "title": "myReviews", "product_id": "home_mini", "product_name": "home mini", "product_category": "voice assistant", "product_price": "39.99", "store_id": "3", "store_zip": "60003", "store_city": "Avon", "store_state": "CT", "product_onsale": "yes", "manufacturer_name": "google", "manufacturer_rebate": "10.0", "user_id": "yash1", "user_age": "24", "user_gender": "M", "user_occupation": "student", "review_rating": "1", "review_date": "10-10-2020", "review_text": "very good"}, {"_id": "ObjectID('5f83826f08c483230c5d9d64')", "title": "myReviews", "product_id": "home_mini", "product_name": "home mini", "product_category": "voice assistant", "product_price": "39.99", "store_id": "6", "store_zip": "75628", "store_city": "Roseville", "store_state": "CA", "product_onsale": "yes", "manufacturer_name": "google", "manufacturer_rebate": "10.0", "user_id": "yash1", "user_age": "24", "user_gender": "M", "user_occupation": "student", "review_rating": "5", "review_date": "10-11-2020", "review_text": "very good"}, {"_id": "ObjectID('5f83828e08c483230c5d9d69')", "title": "myReviews", "product_id": "echo dot", "product_name": "echo dot", "product_category": "voice assistant", "product_price": "49.99", "store_id": "7", "store_zip": "46383", "store_city": "Valparaiso", "store_state": "IN", "product_onsale": "yes", "manufacturer_name": "amazon", "manufacturer_rebate": "10.0", "user_id": "yash1", "user_age": "24", "user_gender": "M", "user_occupation": "student", "review_rating": "4", "review_date": "10-11-2020", "review_text": "test"}, {"_id": "ObjectID('5f8382a008c483230c5d9d6e')", "title": "myReviews", "product_id": "iphone 11 pro", "product_name": "iphone 11 pro", "product_category": "phone", "product_price": "999.00", "store_id": "3", "store_zip": "6801", "store_city": "Avon", "store_state": "CT", "product_onsale": "yes", "manufacturer_name": "apple", "manufacturer_rebate": "10.0", "user_id": "yash1", "user_age": "24", "user_gender": "M", "user_occupation": "student", "review_rating": "1", "review_date": "10-11-2020", "review_text": "test"}, {"_id": "ObjectID('5f8382a908c483230c5d9d73')", "title": "myReviews", "product_id": "quest", "product_name": "quest", "product_category": "vr", "product_price": "399.99", "store_id": "1", "store_zip": "1905", "store_city": "Lynn", "store_state": "MA", "product_onsale": "yes", "manufacturer_name": "oculus", "manufacturer_rebate": "50.0", "user_id": "yash1", "user_age": "24", "user_gender": "M", "user_occupation": "student", "review_rating": "5", "review_date": "10-11-2020", "review_text": "best"}, {"_id": "ObjectID('5f8383a008c483230c5d9d78')", "title": "myReviews", "product_id": "inspire 2", "product_name": "inspire 2", "product_category": "fitness watch", "product_price": "90.00", "store_id": "4", "store_zip": "35957", "store_city": "Boaz", "store_state": "AL", "product_onsale": "yes", "manufacturer_name": "fitbit", "manufacturer_rebate": "40.0", "user_id": "yash1", "user_age": "24", "user_gender": "M", "user_occupation": "student", "review_rating": "3", "review_date": "10-11-2020", "review_text": "average"}, {"_id": "ObjectID('5f83832008c483230c5d9d7d')", "title": "myReviews", "product_id": "macbook air", "product_name": "macbook air", "product_category": "laptop", "product_price": "999.99", "store_id": "2", "store_zip": "10901", "store_city": "Airmont", "store_state": "NY", "product_onsale": "yes", "manufacturer_name": "apple", "manufacturer_rebate": "10.0", "user_id": "yash1", "user_age": "24", "user_gender": "M", "user_occupation": "student", "review_rating": "5", "review_date": "10-11-2020", "review_text": "good"}, {"_id": "ObjectID('5f8383aa08c483230c5d9d83')", "title": "myReviews", "product_id": "macbook air", "product_name": "macbook air", "product_category": "laptop", "product_price": "999.99", "store_id": "4", "store_zip": "35957", "store_city": "Boaz", "store_state": "AL", "product_onsale": "yes", "manufacturer_name": "apple", "manufacturer_rebate": "10.0", "user_id": "yash1", "user_age": "24", "user_gender": "M", "user_occupation": "student", "review_rating": "2", "review_date": "10-11-2020", "review_text": "bad"}, {"_id": "ObjectID('5f8399da08c4832aa08ddc0')", "title": "myReviews", "product_id": "echo dot", "product_name": "echo dot", "product_category": "voice assistant", "product_price": "49.99", "store_id": "1", "store_zip": "1905", "store_city": "Lynn", "store_state": "MA", "product_onsale": "yes", "manufacturer_name": "amazon", "manufacturer_rebate": "10.0", "user_id": "yash1", "user_age": "24", "user_gender": "M", "user_occupation": "student", "review_rating": "5", "review_date": "10-11-2020", "review_text": "good"}, {"_id": "ObjectID('5f8399ef08c4832aa08ddc8')", "title": "myReviews", "product_id": "q70t", "product_name": "q70t", "product_category": "tv", "product_price": "2699.99", "store_id": "1", "store_zip": "1905", "store_city": "Lynn", "store_state": "MA", "product_onsale": "yes", "manufacturer_name": "samsung", "manufacturer_rebate": "10.0", "user_id": "yash1", "user_age": "24", "user_gender": "M", "user_occupation": "student", "review_rating": "3", "review_date": "10-11-2020", "review_text": "test"}, {"_id": "ObjectID('5f839a0908c4832aa08ddca')", "title": "myReviews", "product_id": "nest", "product_name": "nest", "product_category": "voice assistant", "product_price": "89.99", "store_id": "2", "store_zip": "10901", "store_city": "Airmont", "store_state": "NY", "product_onsale": "yes", "manufacturer_name": "google", "manufacturer_rebate": "10.0", "user_id": "yash2", "user_age": "24", "user_gender": "M", "user_occupation": "student", "review_rating": "2", "review_date": "10-11-2020", "review_text": "test"}, {"_id": "ObjectID('5f839a8708c4832aa08ddcc')", "title": "myReviews", "product_id": "tu8000", "product_name": "tu8000", "product_category": "tv", "product_price": "349.99", "store_id": "2", "store_zip": "10901", "store_city": "Airmont", "store_state": "NY", "product_onsale": "yes", "manufacturer_name": "samsung", "manufacturer_rebate": "10.0", "user_id": "yash2", "user_age": "24", "user_gender": "M", "user_occupation": "student", "review_rating": "4", "review_date": "10-11-2020", "review_text": "avg"}, {"_id": "ObjectID('5f839a0e08c4832aa08ddce')", "title": "myReviews", "product_id": "iphone 11 pro", "product_name": "iphone 11 pro", "product_category": "phone", "product_price": "999.99", "store_id": "3", "store_zip": "6801", "store_city": "Avon", "store_state": "CT", "product_onsale": "yes", "manufacturer_name": "apple", "manufacturer_rebate": "10.0", "user_id": "yash3", "user_age": "24", "user_gender": "M", "user_occupation": "student", "review_rating": "4", "review_date": "10-11-2020", "review_text": "good"}, {"_id": "ObjectID('5f839b0e08c4832aa08dd0')", "title": "myReviews", "product_id": "iphone 11 pro", "product_name": "iphone 11 pro", "product_category": "phone", "product_price": "999.99", "store_id": "3", "store_zip": "6801", "store_city": "Avon", "store_state": "CT", "product_onsale": "yes", "manufacturer_name": "apple", "manufacturer_rebate": "10.0", "user_id": "yash3", "user_age": "24", "user_gender": "M", "user_occupation": "student", "review_rating": "4", "review_date": "10-11-2020", "review_text": "good"}
>
```

3 • `select productid, transactionstatus, isreturned from orders;`

Result Grid			
Filter Rows:			
Export: Wrap Cell Content:			
	productid	transactionstatus	isreturned
▶	alpha_100	Approved	1
	home_mini	Approved	0
	iphone_11_pro	Approved	0
	bar_5.1	disputed	1
	macbook-air	disputed	1
	tu8000	disputed	1
	fit	disputed	1
	playstation_vr	disputed	0
	series_5	disputed	1
	iphone_11_pro	Approved	0
	series_5	disputed	1
	wh_1000xm4	Approved	0
	playstation_vr	disputed	0
	series_5	disputed	1
	t_5	disputed	0
	home_mini	Approved	0

- Deal Match Guarantees

DealMatches.txt file.

DealMatches - Notepad

File Edit Format View Help

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/PWSORbH1eT>
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/qMbFE64Ely>
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>
Save \$30 on the WD My Passport Go 500GB External USB 3.0 Portable Solid State Drive - Black with Cobalt Trim. #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/PWSORbH1eT>
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>

Show deals and related products on home page.

BestDeal

CURRENT DEALS

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: Go to the edge and beyond. See more than ever on the Infinity Display of the new Samsung Galaxy S10. <https://t.co/PWSORbH1eT>

voice assistant▼

tv▼

phone▼

smart watch▼

pet tracker▼

sound system▼

vr▼

laptop▼

fitness watch▼

headphone▼

Deal Matches



whistle-go (old)
\$129.99(discount: 20.0%)



samsung-galaxy (new)
\$239.99(discount: 40.0%)

• Recommender

matrixFactorizationBasedRecommendations.csv file.

File Home Insert Draw Page Layout Formulas					
<div> <div> <div></div> <div>Paste</div> </div> <div> <div></div> <div>Cut</div> </div> <div> <div></div> <div>Copy</div> </div> <div> <div></div> <div>Format Painter</div> </div> </div> <div>Clipboard</div>		<div> <div>Calibri</div> <div>11</div> <div>A</div> </div> <div> <div>B</div> <div>I</div> <div>U</div> <div></div> <div></div> <div></div> </div> <div>Font</div>			
A1		yash1			
	A	B	C	D	E
1	yash1	['tu8000', 'galaxy', 'bar_5.1']			
2	yash2	['echo_dot', 'home_mini', 'galaxy']			
3	yash3	['quest', 'inspire_2', 'galaxy']			
4	yash4	['echo_dot', 'tu8000', 'quest']			
5	yash5	['galaxy', 'echo_dot', 'home_mini']			
6	yash6	['tu8000', 'iphone_11_pro', 'echo_dot']			
7	yash7	['home_mini', 'home_max', 'echo_dot']			
8	yash8	['iphone_11_pro', 'home_max', 'quest']			
9	yash9	['echo_dot', 'galaxy', 'home_max']			
10	yash10	['home_max', 'quest', 'iphone_11_pro']			
11	yash11	['bar_5.1', 'echo_dot', 'home_max']			
12	yash12	['galaxy', 'home_max', 'iphone_11_pro']			
13	yash13	['home_mini', 'tu8000', 'home_max']			
14	yash14	['home_max', 'quest', 'tu8000']			
15	yash15	['home_mini', 'iphone_11_pro', 'tu8000']			
16	yash16	['galaxy', 'echo_dot', 'quest']			
17	yash17	['quest', 'echo_dot', 'galaxy']			
18	yash18	['iphone_11_pro', 'home_max', 'quest']			
19	yash19	['tu8000', 'home_mini', 'iphone_11_pro']			
20	yash20	['galaxy', 'home_max', 'echo_dot']			
21	yash23	['tu8000', 'echo_dot', 'galaxy']			
22					

mongodata_test.csv file.

File Home Insert Draw Page Layout Formulas				
Clipboard		Font		
A1		yash1		
	A	B	C	D
1	yash1	home_mini	1	
2	yash1	home_mini	4	
3	yash1	wh_1000xm4	1	
4	yash1	home_mini	1	
5	yash1	home_mini	5	
6	yash1	echo_dot	4	
7	yash1	iphone_11_pro	3	
8	yash1	quest	5	
9	yash1	inspire_2	3	
10	yash1	macbook-air	5	
11	yash1	macbook-air	2	
12	yash1	echo_dot	5	
13	yash1	q70t	3	
14	yash2	nest	2	
15	yash2	tu8000	4	
16	yash3	iphone_11_pro	4	
17	yash3	iphone_11_pro	4	
18	yash3	series_5	5	
19	yash4	p30_pro	2	
20	yash4	galaxy	5	
21	yash5	t_5	5	
22	yash5	bar_5.1	5	
23	yash6	t_5	3	
24	yash6	bar_5.1	2	
25	yash7	playstation_vr	5	
26	yash7	macbook-air	3	
27	yash8	playstation_vr	1	
28	yash8	macbook-air	1	
29	yash9	fit	2	
30	yash9	wh_1000xm4	4	
		mongodata_test		

Recommended product for user yash2

BestDeal

Final Amount : \$699.98

Delivery Option :

☒ Home Delivery

☐ In-Store Pickup

CheckOut

voice assistant▼

tv▼

phone▼

smart watch▼

pet tracker▼

sound system▼

vr▼

laptop▼

fitness watch▼

headphone▼

Recommended Products

OnSale



Buy Now

WriteReview

ViewReview

google-home mini (old)
\$39.99(discount: 0.0%)

Accessories



BestDeal

Final Amount : \$699.98

Delivery Option :

☒ Home Delivery

☐ In-Store Pickup

CheckOut

voice assistant▼

tv▼

phone▼

smart watch▼

pet tracker▼

sound system▼

vr▼

laptop▼

fitness watch▼

headphone▼

Recommended Products

OnSale



Buy Now

WriteReview

ViewReview

amazon-echo dot (old)
\$49.99(discount: 0.0%)

Accessories

Recommended product for user yash3

BestDeal

Total discount : \$395.991
Final Amount : \$3143.979
Delivery Option :
☒ Home Delivery
☐ In-Store Pickup

CheckOut

- voice assistant▼
- tv▼
- phone▼
- smart watch▼
- pet tracker▼
- sound system▼
- vr▼
- laptop▼
- fitness watch▼
- headphone▼

Recommended Products



Buy Now
WriteReview
ViewReview

oculus-quest (new)
\$599.99(discount: 50.0%)

Accessories

OnSale

BestDeal

Total discount : \$395.991
Final Amount : \$3143.979
Delivery Option :
☒ Home Delivery
☐ In-Store Pickup

CheckOut

- voice assistant▼
- tv▼
- phone▼
- smart watch▼
- pet tracker▼
- sound system▼
- vr▼
- laptop▼
- fitness watch▼
- headphone▼

Recommended Products



Buy Now
WriteReview
ViewReview

fitbit-inspire 2 (new)
\$99.99(discount: 40.0%)

Accessories

OnSale

Recommended product for user yash4

BestDeal

- voice assistant▼
- tv▼
- phone▼
- smart watch▼
- pet tracker▼
- sound system▼
- vr▼
- laptop▼
- fitness watch▼
- headphone▼

Final Amount :\$943.984

Delivery Option :

Home Delivery

Clin-Store Pickup

CheckOut

Recommended Products



oculus-quest (new)
\$599.99(discount: 50.0%)

Accessories

OnSale

BestDeal

- voice assistant▼
- tv▼
- phone▼
- smart watch▼
- pet tracker▼
- sound system▼
- vr▼
- laptop▼
- fitness watch▼
- headphone▼

Final Amount :\$943.984

Delivery Option :

Home Delivery

Clin-Store Pickup

CheckOut

Recommended Products



amazon-echo dot (old)
\$49.99(discount: 0.0%)

Accessories

OnSale