

# Factorization Machine - Partial

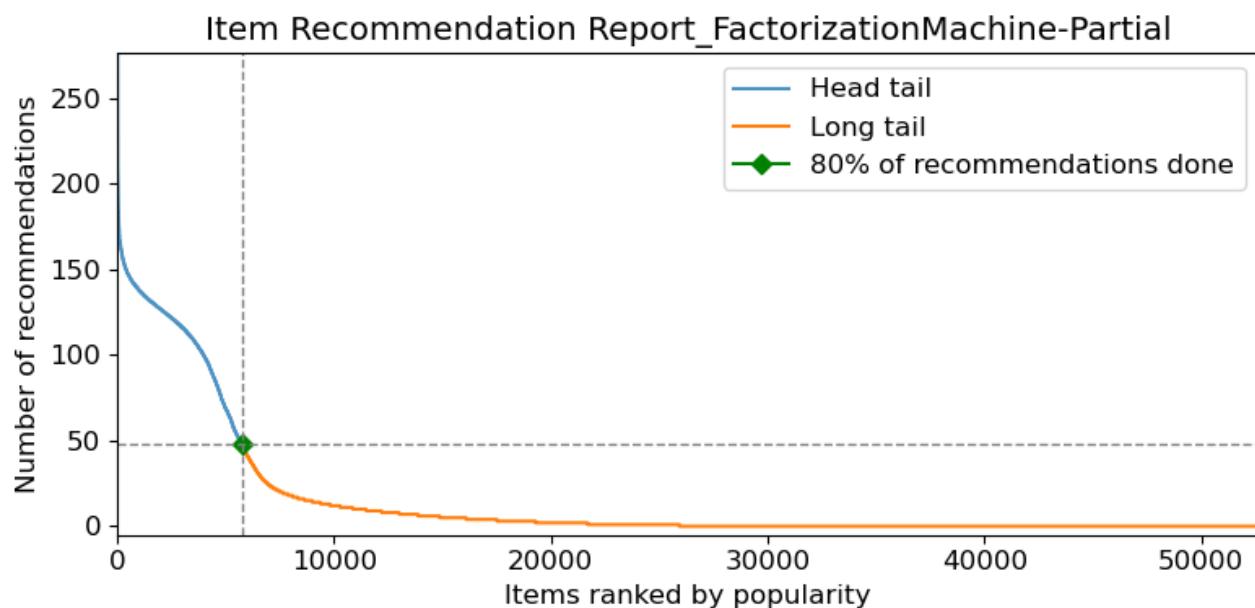
Class name FactorizationMachineModel

## Model results

HR@10 NDCG@10 COV@10 GINI@10 NOV@10  
0.3018 0.1528 0.4923 0.8470 9.6543

## Recommendation distribution

Number Products at what reach the 80% of the recommendations 5729 (Accumulate recommendations 640030)



## 100 first items and accumulative percentage or 80% (whatever it happens first)

Total number of items > 800000

Cummulative percentaje displayed items -> 2.3350 %

0372860001 81557 276	0706016003 82668 247	0610776002 80672 244	0760084003 80714 233	0909370001 84435 223	0715624001 82114 218	0827968001 82062 217	0918292001 81888 215	0915529001 80885 212	0850917001 80475 211
0787946002 82041 211	0806388001 80286 210	0714790020 80319 205	0893059004 80324 203	0706016002 80124 202	0844409002 80934 201	0806388005 80740 200	0803757001 81185 200	0610776001 80549 199	0554598001 82205 198



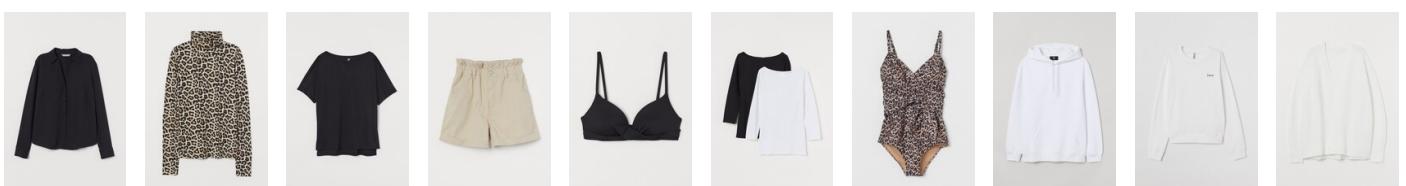
0823118001 0781613006 0720125041 0547780003 0562245046 0573085042 0678942001 0730683050 0715624052 0554598065  
81811 83207 80574 80642 80388 80852 80992 85663 91173 82207  
197 197 196 196 193 193 193 193 193 192



0767862001 0832465001 0719655001 0736870001 0806388003 0800691008 0865799006 0803757004 0759871025 0768912001  
83853 91385 80596 89671 80800 81431 82228 82284 81856 81382  
192 192 191 191 189 189 189 189 188 187



0677930066 0915526001 0806388002 0891591001 0853881001 0896169005 0759871002 0804992014 0868823008 0819113001  
81905 87029 80289 86511 81648 92583 81859 82542 86364 91713  
186 186 185 185 184 184 183 183 183 183



0762846006 0865929003 0905518001 0859105002 0806225002 0884851001 0689047004 0685814003 0677930023 0863646005  
81340 82947 89281 80146 82868 83414 92288 87046 81779 85335  
181 181 181 180 180 180 180 179 178 178



0911950001 0718278001 0877278002 0762656002 0778064028 0854043006 0780297001 0740519002 0599580012 0891591007  
80287 80640 83635 85008 87278 89579 90064 81764 84446 85460  
177 176 176 175 175 175 175 174 174 174



0685814001 0856310001 0850259002 0817472005 0556539001 0759814009 0815434001 0718278002 0816423005 0791587015  
80056 80208 80921 81549 81601 82120 82265 82840 89167 90281  
173 173 173 173 173 173 173 173 173 173



0158340001 0253448003 0739819010 0547780001 0636323001 0803757014 0736923010 0723469002 0730683001 0820870001  
80269 82551 91669 80715 83277 85342 86555 80671 83183 86156

172	172	172	171	171	171	171	170	170	170
									
0834412010 96320 170	0865926002 88219 169	0864562001 90376 169	0817472002 80443 168	0568597006 81993 168	0805000001 84118 168	0822203005 84748 168	0797608001 86304 168	0706016004 86482 168	0897423001 87119 168

## First users sample

User: FN 1.0

Active 1.0

club\_member\_status ACTIVE

fashion\_news\_frequency Regularly

age 31.0

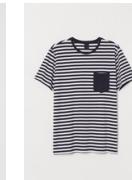
postal\_code 9a9d6e1a1a1092815671be3a44a1365b678ac3e51fba4e...

Name: 0001177027259b455f979d85a278e4b280205d4de5cce4bb83ccbb8d5dbb4b92, dtype: object

## Ground truth + last interactions

									
0708485004 80000	0820462009 80001	0863456003 80002	0570002090 80003	0863456005 80004	0869232001 80005	0810170001 80006	0810172003 80007	0775402002 80008	0857716002 80009
									
0841632001 80010	0811715001 80011	0777243002 80012	0860170002 80013	0831429001 80014	0198714001 80015	0857725002 80016	0851450001 80017	0867989001 80018	0834063003 80019
									
0810800001 80020	0820032004 80021	0852149001 80022	0851936003 80023	0706104007 80024	0811715001 80011	0843940001 80025			

## Recommendations

									
0499334001 85827	0881759001 95199	0825726001 100762	0734460014 105671	0734512001 102243	0509669004 83469	0868747001 81459	0855080008 88773	0829180003 99114	0782616023 88033

User: FN NaN

Active NaN

club\_member\_status ACTIVE

fashion\_news\_frequency NONE

age 24.0

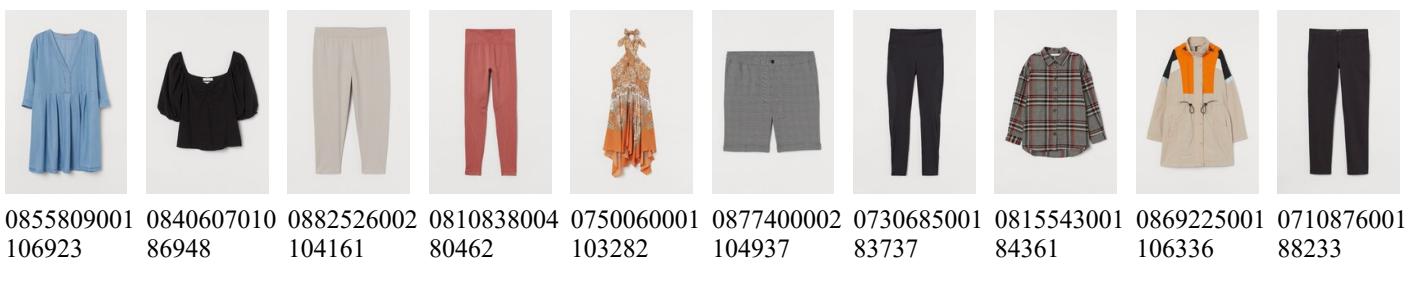
postal\_code 8eacf865805e6b284a015bc1d0594252dd07451f5c7616...

Name: 00023e3dd8618bc63ccad995a5ac62e21177338d642d66b42e0038c6b10f655a, dtype: object

### Ground truth + last interactions



### Recommendations



User: FN NaN

Active NaN

club\_member\_status ACTIVE

fashion\_news\_frequency NONE

age 48.0

postal\_code 9b9e1c0198670ed17ef23e4757eac8084be0d4777fd79f...

Name: 0002d2ef78ec29c03a951963a2694be963c06d7123b9726e4bde96e828d770f6, dtype: object

### Ground truth + last interactions



0827411001 0832330002 0812658001 0688537004 0780457001 0808628002 0763673002 0854637002 0895346003 0831467002  
80062 80063 80064 80065 80066 80067 80068 80069 80070 80071



0818032003 0808624001 0817353002 0779250008 0827704004 0865714002 0779250008 0836284003 0827704004 0836142002  
80072 80073 80074 80075 80076 80077 80075 80078 80076 80079



0836142003 0715624035 0828114002 0846442003 0828114003 0823195001 0824185001 0656304004 0781813001 0747192001  
80080 80081 80082 80083 80084 80085 80086 80087 80088 80089



0714825005  
80090

## Recommendations



0800691026 0757903001 0407653001 0771603001 **0827411001** 08062 0803083001 0921096004 0881891003 0708185002 0770350003  
91340 86662 88727 88953 80062 84602 90210 91279 103174 96384

User: FN NaN

Active NaN

club\_member\_status ACTIVE

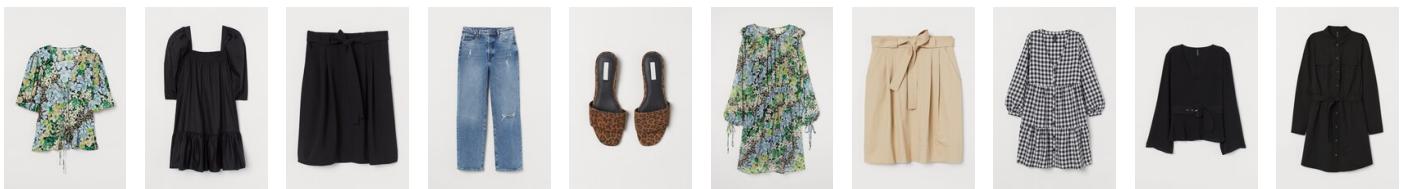
fashion\_news\_frequency NONE

age 25.0

postal\_code e3fe8160ace8eba9c7e2c8fb711c1b4393994e2c1cd032...

Name: 0002e6cdaab622b5047407efc0d0bf85e23220e092012095d98119fa9cb3cee7, dtype: object

## Ground truth + last interactions



0859148001 0857571001 0849257001 0812207003 0510420008 0830953001 0849257002 0850622002 0858883001 0797078014  
80091 80092 80093 80094 80095 80096 80097 80098 80099 80100



0836699002 0881562001 0832253001 0856332001 0749615010 0640021011 0753737015 0640021019 0887949002 0783346024  
80101 80102 80103 80104 80105 80106 80107 80108 80109 80110



0835008005 0862325004 0789303001 0665481013  
80111 80112 80113 80114

### Recommendations



0906822001 0855239002 0838787005 0842727002 0764415006 0724904009 0758282003 0838825002 0521062007 0699081001  
94243 87713 87335 89824 91674 80682 103381 90309 96377 80129

User: FN NaN

Active NaN

club\_member\_status ACTIVE

fashion\_news\_frequency NONE

age 20.0

postal\_code 777fe14eafe75737a8e234db25da1d0e0c5009c3931f02...

Name: 00045027219e894b683fb4687211e2d0c904c268e9f28d370d9a84994678ac71, dtype: object

### Ground truth + last interactions



0879088001 0832481001 0907696001 0817477001 0854679002 0854677002 0864716001 0854679005 0854677004 0706016002  
80115 80116 80117 80118 80119 80120 80121 80122 80123 80124



0795440007 0609719001 0832298006 0834258001 0699081001 0863665002 0759469001 0632982054 0633152012 0797710001  
80125 80126 80127 80128 80129 80130 80131 80132 80133 80134

### Recommendations



0785018003 0879088001 0652730013 0845241001 0712711001 0852300001 0665481011 0873678003 0821397004 0928892001  
80354 80115 94329 85651 82839 87497 85154 89958 81594 112504

User: FN NaN

Active NaN

club\_member\_status ACTIVE

fashion\_news\_frequency NONE

age 21.0

postal\_code 2c29ae653a9282cce4151bd87643c907644e09541abc28...

Name: 0005340aa69bb5a28d98712a36d8f669024bce137e3c82a618ea49032b9023c6, dtype: object

### Ground truth + last interactions



### Recommendations



User: FN NaN

Active NaN

club\_member\_status ACTIVE

fashion\_news\_frequency NONE

age 40.0

postal\_code 0c0e15f8fa88a1d4aa6ca8a0b4a8289ca1affbaebdea22...

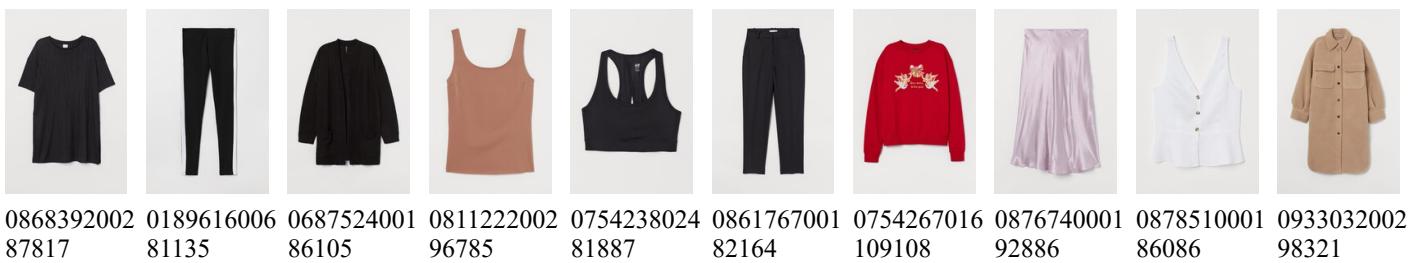
Name: 00075ef36696a7b4ed8c83e22a4bf7ea7c90ee110991ec5e0fb21b12f862f73d, dtype: object

### Ground truth + last interactions

									
0860285001 80160	0824526004 80161	0836130007 80162	0464297007 80163	0854602002 80164	0897684001 80165	0751471022 80166	0611415035 80167	0897684002 80168	0868876001 80169
									
0863595006 80170	0874937001 80171	0762028005 80172	0887770002 80173	0873538001 80174	0880358003 80175	0818031002 80176	0832453002 80177	0778534004 80178	0840607009 80179
									
0869663001 80180	0816521002 80181	0888229005 80182	0599580014 80183	0849597002 80184	0599580028 80185	0743123001 80186	0849597003 80187	0599580052 80188	0882651001 80189
									
0824767003 80190	0880749002 80191	0825471005 80192	0825550002 80193	0856848002 80194	0794389001 80195	0867579001 80196	0850249002 80197	0736869001 80198	0850241001 80199
									
0492897001 80200	0844198001 80201	0800800003 80202	0827687003 80203	0859077005 80204	0820357002 80205	0766495009 80206	0843687004 80207	0856310001 80208	0855673001 80209
									
0817361007 80210	0843687002 80211	0825577003 80212	0921096003 80213	0780314001 80214	0852374004 80215	0659854020 80216	0824526003 80217	0824526001 80218	0855148001 80219
									
0849334001 80220	0808698004 80221	0821336004 80222	0816166002 80223	0808025001 80224	0861848001 80225	0829147001 80226	0884245001 80227	0832475002 80228	0797058002 80229



## Recommendations



User: FN NaN

Active NaN

club\_member\_status ACTIVE

fashion\_news\_frequency NONE

age 23.0

postal\_code 3119ea10ffe5ac3419b9127589a61b33e1ae38ecbb997b...

Name: 00077dbd5c4a4991e092e63893ccf29294a9d5c46e85010e95f2fc10bf9437a4, dtype: object

## Ground truth + last interactions

									
0158340001 80269	0867966009 80270	0915529003 80271	0932798002 80272	0915529005 80273	0486639003 80274	0918171001 80275	0936622001 80276	0907149001 80277	0935892001 80278
									
0448509014 80279	0799365027 80280	0879189005 80281	0929744001 80282	0865799005 80283	0456163060 80284	0933989002 80285	0806388001 80286	0911950001 80287	0897687001 80288
									
0806388002 80289	0817401001 80290	0889379006 80291	0824337002 80292	0720125001 80293	0799190004 80294	0826949004 80295	0826955011 80296	0808651003 80297	0832311003 80298
									
0880786001 80299	0857812003 80300	0843906001 80301	0825577002 80302	0807642001 80303	0806199002 80304	0861685001 80305	0880774001 80306	0826492006 80307	0796685001 80050
									
0776179001 80308	0823820001 80309	0749358001 80310	0831686001 80311	0829017008 80312	0829017008 80312	0732842011 80313	0729006002 80314	0799067001 80315	0448509014 80279
									
0805505001 80316	0777628003 80317	0831686003 80318	0714790020 80319	0843594001 80320	0868410001 80321	0826492007 80322	0763284006 80323		

## Recommendations

									
0865520002 88600	0832997004 98756	0852374013 101560	0772764001 86588	0857171001 92310	0640021018 95422	0819113001 91713	0718278002 82840	0820058001 107234	0864755008 94126

User: FN 1.0  
Active 1.0

club\_member\_status ACTIVE  
fashion\_news\_frequency Regularly  
age 50.0  
postal\_code 860a370c01b1eeeebe3f3c78241f3236c79b0c41669c19e...  
Name: 0008968c0d451dbc5a9968da03196fe20051965edde7413775c4eb3be9abe9c2, dtype: object

### Ground truth + last interactions



### Recommendations



User: FN NaN  
Active NaN  
club\_member\_status ACTIVE  
fashion\_news\_frequency NONE  
age 35.0  
postal\_code b1ea876cc67d31c655cf224127b4b4271f38f496ac892...  
Name: 0008d30a148478dc88c69af6c51230ad5802590afc84889af16b661e64407408, dtype: object

### Ground truth + last interactions

									
0895804006 80355	0757347002 80356	0757347008 80357	0895804005 80358	0884847001 80359	0622966014 80360	0805917001 80361	0783346018 80362	0888843001 80363	0786336005 80364
									
0771337002 80365	0842112001 80366	0857570001 80367	0879646001 80368	0857280001 80369	0602409002 80370	0831395001 80371	0564358053 80372	0822201001 80373	0849586004 80374
									
0843332001 80375	0787285005 80376	0837939004 80377	0824526002 80378	0840426001 80379	0608210005 80380	0788846004 80381	0573937001 80382	0653145007 80383	0573937006 80384
									
0832616001 80385	0749615001 80386	0562245088 80387	0562245046 80388	0786193001 80389	0775388004 80390	0637255001 80391	0808586001 80392	0800803001 80393	0812167004 80394
									
0806335001 80395	0784698001 80396	0812241002 80397	0734460002 80398	0631878005 80399	0734460006 80400	0762130001 80401	0592541001 80402	0767133002 80403	0650672001 80404
									
0734460006 80400	0710389001 80405	0631878001 80406	0804248001 80407	0764514001 80408	0710056003 80409	0735945002 80410	0771665001 80411	0732297001 80412	

## Recommendations

									
0673677015 83436	0689389058 80662	0537895002 87263	0909519003 99257	0837443001 82649	0798426002 91998	0823793002 86524	0914960002 86861	0570003081 98139	0665044006 112486

User: FN NaN  
Active NaN

club\_member\_status PRE-CREATE

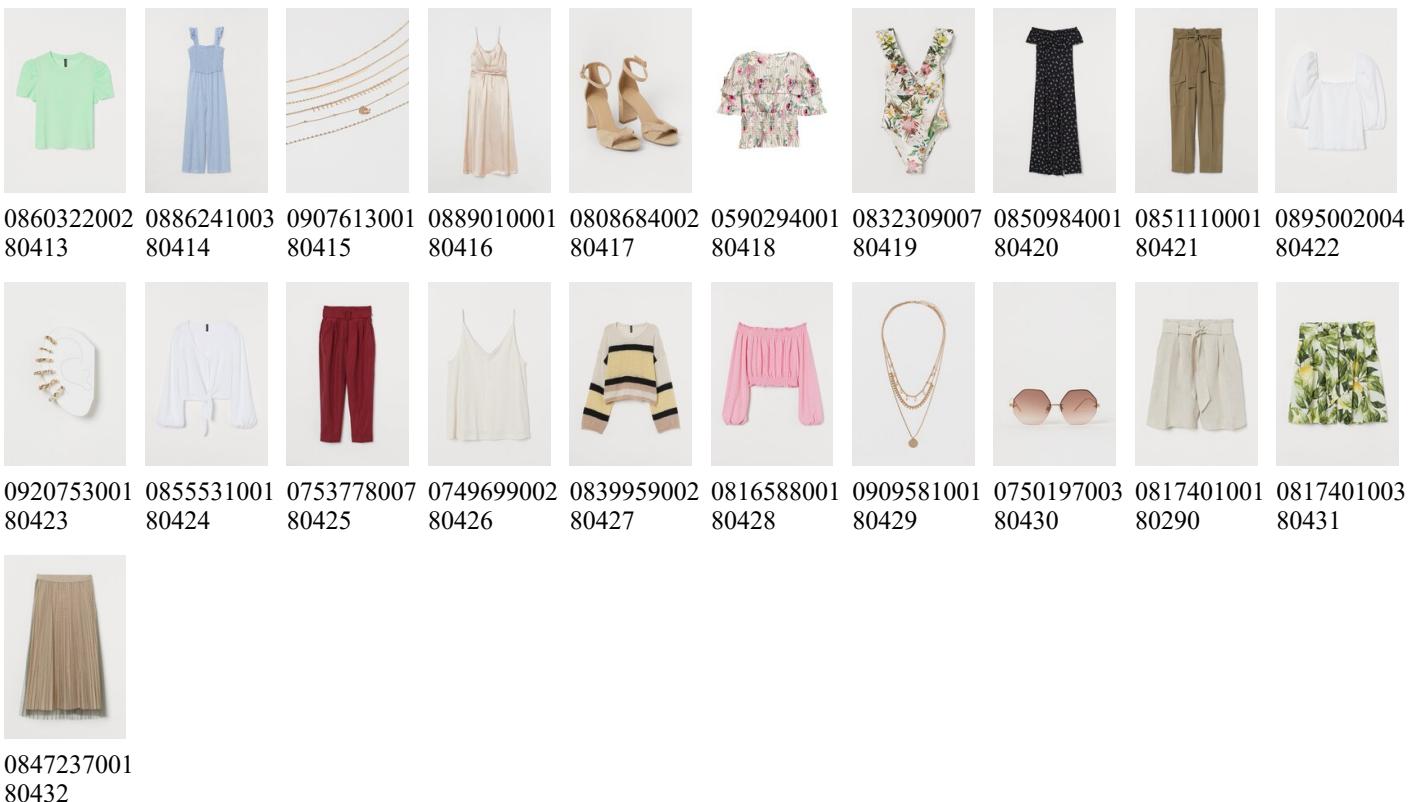
fashion\_news\_frequency NONE

age NaN

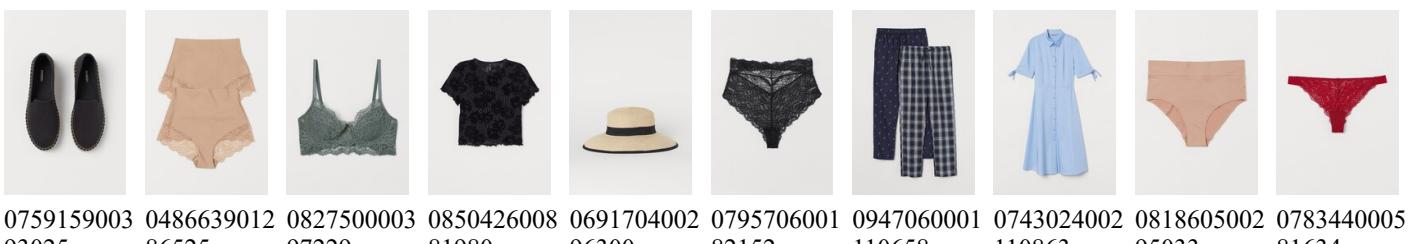
postal\_code 69fa89d2815afb4ab4ea461a077a76e4b25f30afc43f4e...

Name: 000a5f3c8be9167cb0d09dd8a17b6b54998e9e83faaf52072ee9434b85c85dd3, dtype: object

### Ground truth + last interactions



### Recommendations



User: FN NaN

Active NaN

club\_member\_status ACTIVE

fashion\_news\_frequency NONE

age 33.0

postal\_code a764be1540e0791bac63069dc3ecb9a85e009a4bc09bd7...

Name: 000a74a8ce6e616c1d26d186d8ffae487878b89223b60f5d369665e367faa677, dtype: object

### Ground truth + last interactions





0817472002 0845032001 0751530001 0863937008 0839194006 0832361003 0832361001 0524529013 0826203001 0832362003  
80443 80444 80445 80446 80439 80447 80448 80449 80450 80451



0873653001 0742472001 0836551006 0808619001 0808619004 0829152002 0810838010 0787481007 0866086001 0750423013  
80452 80453 80454 80455 80456 80457 80458 80459 80460 80461



0810838004 0861767002 0854043007 0832311002  
80462 80463 80464 80465

## Recommendations



0761296011 0684209019 0887911002 0869976001 0708185002 0887750001 0470789030 0825585007 0554450004 0754267052  
84879 80876 80433 105872 103174 93277 94549 80982 85561 88237

User: FN NaN

Active NaN

club\_member\_status ACTIVE

fashion\_news\_frequency NONE

age 52.0

postal\_code ce8fa5fed635b26618fbf59031e307b50aceb1dbe3fb39...

Name: 000ab6e1f39b83d936d5855c412d9695f40331c3e9d632d70f6e823ff7aa2b16, dtype: object

## Ground truth + last interactions



0562245097 0786336003 0822238003 0757906005 0610776068 0876337001 0807820010 0568601038 0864500001 0850917001  
80466 80467 80468 80469 80470 80471 80472 80473 80474 80475



0779781007 0821746001 0762796008 0846115001 0809487001 0762846010 0831611001 0703152001 0815808003 0757303016  
80476 80262 80477 80478 80479 80480 80481 80482 80483 80484



0828268001 0787153002 0304786008 0795706003 0796137007 0785086002 0815026001 0796053001 0789304003 0787153002  
80241 80485 80486 80487 80488 80489 80490 80491 80492 80485



0776041002 0662888013 0792817002 0693243015 0762856008 0805976001 0763280004 0790096003  
80493 80494 80495 80496 80497 80498 80499 80500

## Recommendations



0766274001 0562245097 0791787002 0855769002 0783504004 0845576001 0660599002 0525500032 0767046001 0762656002  
84505 80466 92907 95398 83294 85031 84532 91393 100901 85008

User: FN 1.0

Active 1.0

club\_member\_status ACTIVE

fashion\_news\_frequency Regularly

age 59.0

postal\_code 2c29ae653a9282cce4151bd87643c907644e09541abc28...

Name: 000b31552d3785c79833262bbeafa484cbc43d7b612b3c8fc696260b5afaadc4, dtype: object

## Ground truth + last interactions



0820613001 0902224002 0862693002 0832359001 0825169001 0862167001 0554450026 0777016001 0750424014 0664074007  
80501 80502 80503 80504 80505 80506 80507 80508 80509 80510



0640467005 0844302001 0691695015 0664074067 0760084011 0821759001 0664074056 0802023003 0714807004 0651456015  
80511 80512 80513 80514 80515 80516 80517 80518 80519 80520



0746011005 0693242019  
80521 80522

## Recommendations



0843614001 0820613001 0807362001 0761713001 0873645003 0767813001 0711024002 0456163062 0622955006 0878755001  
101022 80501 106530 90782 99950 90650 86765 88281 81852 105539

User: FN NaN

Active NaN

club\_member\_status ACTIVE

fashion\_news\_frequency NONE

age 32.0

postal\_code 70597f58bb89bb9d365ce8079ce33c7067f2bf8bf3334...

Name: 000c1d5fa43b885d4c39b141d1ea59ebd7d7e93eae9482843ea2832fbfdbe664, dtype: object

## Ground truth + last interactions



0756420005 0870282001 0783346018 0860256002 0867322001 0664074030 0537116012 0772902002 0594987022 0610776068  
80523 80524 80362 80525 80526 80527 80528 80529 80530 80470

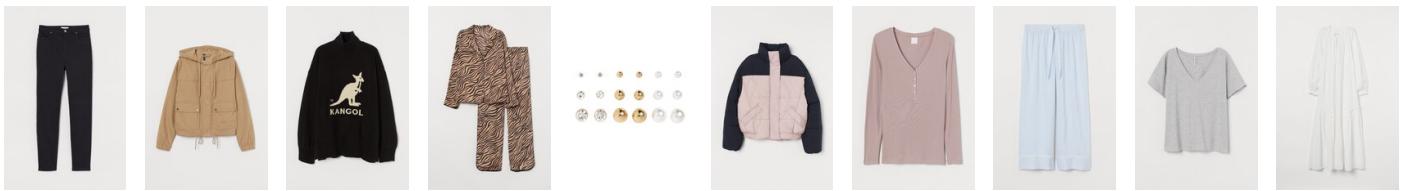


0660308001 0828536001 0653188002 0610776071 0841960003 0751583002 0824995001 0685816004 0441386008 0685816008  
80531 80532 80533 80534 80535 80536 80537 80538 80539 80540



0569997022 0452898031 0569997012 0596400008 0575347010 0791837001 0347200001 0778175001  
80541 80542 80543 80544 80545 80546 80547 80548

## Recommendations



0750422018 0821911004 0911699002 0784722001 0407653001 0773898002 0819520008 0756420005 0718278003 0857277001  
82785 112700 106677 88785 88727 88615 98186 80523 90574 80745

User: FN NaN

Active NaN

club\_member\_status ACTIVE

fashion\_news\_frequency NONE

age 21.0

postal\_code 39026059913abad166ae7c725d5b3714bc04b41e0a565f...

Name: 000c742a054f1180117024953ea31c3fa65eb47e69990a405f4fc5a2d3fbe6aa, dtype: object

### Ground truth + last interactions



### Recommendations



0854301002  
86537    0790383007  
84395    0739590032  
80879    **0610776001  
80549**    0756248001  
82764    0901607003  
88721    0801199001  
94430    0859186001  
81150    0821115003  
86248    0646490017  
97358

User: FN 1.0

Active 1.0

club\_member\_status ACTIVE

fashion\_news\_frequency Regularly

age 67.0

postal\_code bdc369501324ac90384f266a514abd65ecd5371de8c6df...

Name: 000eae69313b4fc1824fa7e439f168cc140bf4c3f3a7e95722a62d209c296c60, dtype: object

### Ground truth + last interactions



0720125041 0562245018 0562245018 0562245088 0562245025 0599580061 0844294002 0762096002 0795621001 0679285019  
80574 80575 80575 80387 80576 80577 80578 80579 80580 80581



0829991002 0787481007 0841402001 0841402003 0679285018 0679285016 0828268001 0846327003 0589599047 0746775003  
80582 80459 80583 80584 80585 80586 80241 80587 80588 80589

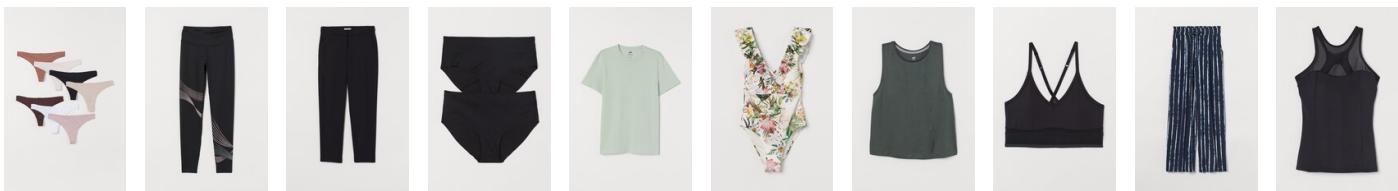


0746775005 0795621001 0699598004 0840203001 0706016011 0699598011 0699598006 0719655001 0762856014 0764084011  
80590 80580 80591 80592 80593 80594 80595 80596 80597 80598



0697054003 0562245046 0762015003 0808919001 0730683006 0757903002  
80599 80388 80600 80601 80602 80603

## Recommendations



0868309001 0720125041 0708311006 0733067001 0685816041 0832309007 0807379004 0742079001 0892051004 0836827001  
95001 80574 90172 90494 95424 80419 86655 88147 88414 85190

User: FN NaN

Active NaN

club\_member\_status ACTIVE

fashion\_news\_frequency NONE

age 48.0

postal\_code d0b267896af62f036d4871ad5edf0aa6c9cf6d77207df...

Name: 000f7535bdc611ad136a9f04746d6b1431f50a7f60fbbed14ea401d602badb69, dtype: object

## Ground truth + last interactions



0910132001 0453358002 0875469004 0869052001 0857855001 0816166004 0859711001 0853325001 0751471001 0818031002  
80604 80605 80027 80606 80607 80608 80609 80610 80258 80176



0751471021 0816845001 0842302002 0614854013 0763270002 0653275008 0653275005 0817953001 0763270002 0160442007  
80611 80612 80613 80614 80615 80616 80617 80618 80615 80619

## Recommendations



0516000090 0549914003 0821398003 0742034001 0832465001 0833499003 0853325003 0767116002 0809835001 **0910132001**  
94520 81205 83610 84511 91385 90302 91414 88960 86382 **80604**

User: FN NaN

Active NaN

club\_member\_status ACTIVE

fashion\_news\_frequency NONE

age 41.0

postal\_code 257dc7b7d0e974a06cddfec553e3ac7916142ac4f6c5c8...

Name: 000fa1b80857fa40bf25990bc1b1b65afc63923a8e4b5762db34e4bb46032d29, dtype: object

## Ground truth + last interactions



0879291001 0758034001 0801673002 0762143001 0748355018 0801673015 0685813001 0685813037 0863587005 0801673001  
80620 80621 80622 80623 80624 80625 80626 80627 80628 80629



0872278001 0880099002 0835605004 0868059001 0843551003 0810838010 0470789019 0863477001 0717816003 0820960002  
80630 80631 80632 80633 80634 80458 80635 80636 80637 80638



0470789019 0741356003 0718278001 0733749025 0547780003 0789326001 0685814001 0685813003 0836327003 0752857001  
80635 80639 80640 80641 80642 80643 80056 80644 80645 80646



0764624005 0773989001  
80647 80648

## Recommendations



0834217009 0797567002 0824352005 0803176001 0743633005 0716590010 0884771002 0833459001 0786176001 0747216004  
82822 101610 103831 99722 84123 98802 104338 93833 96768 112046

User: FN NaN

Active NaN

club\_member\_status ACTIVE

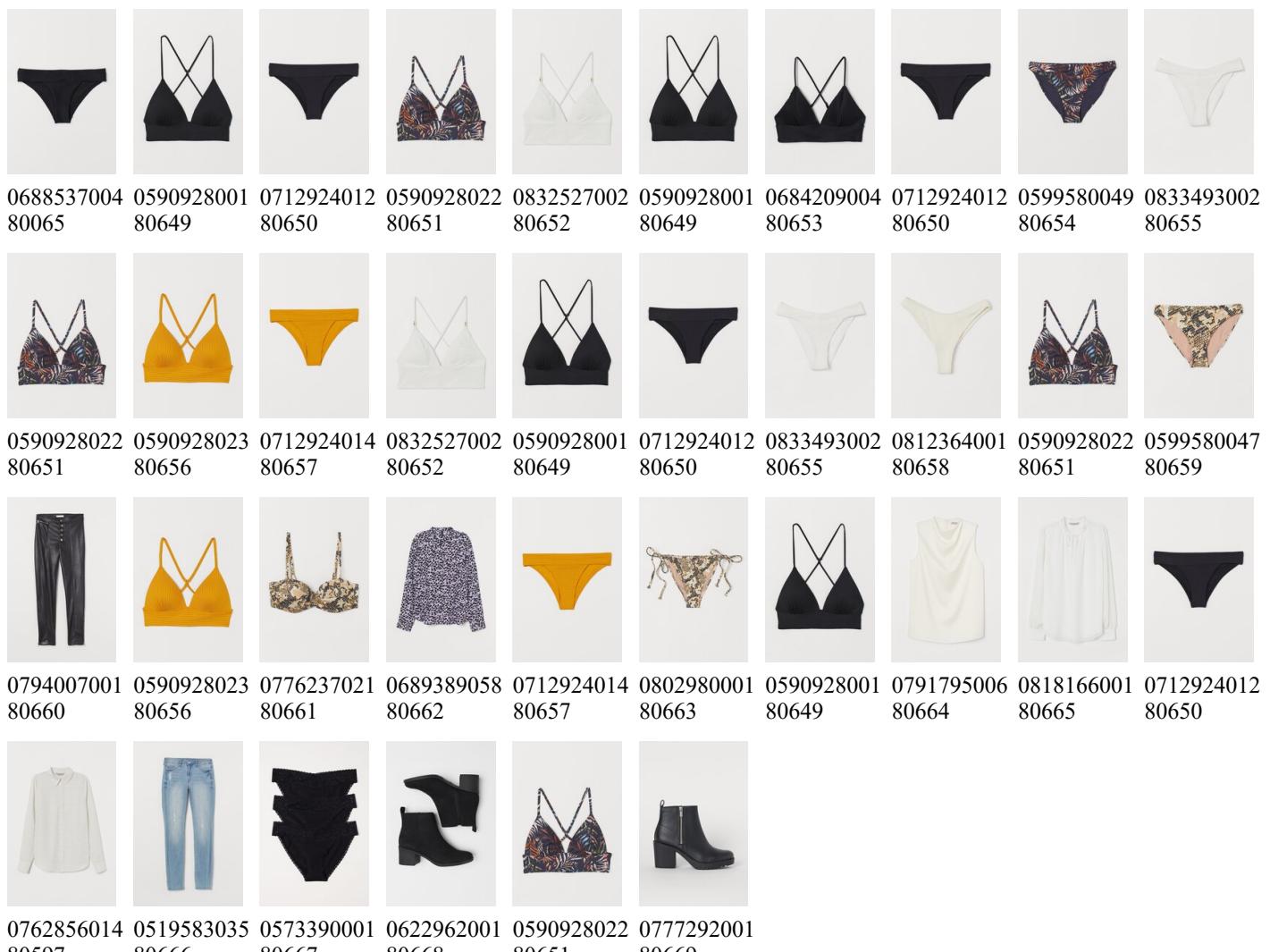
fashion\_news\_frequency NONE

age 27.0

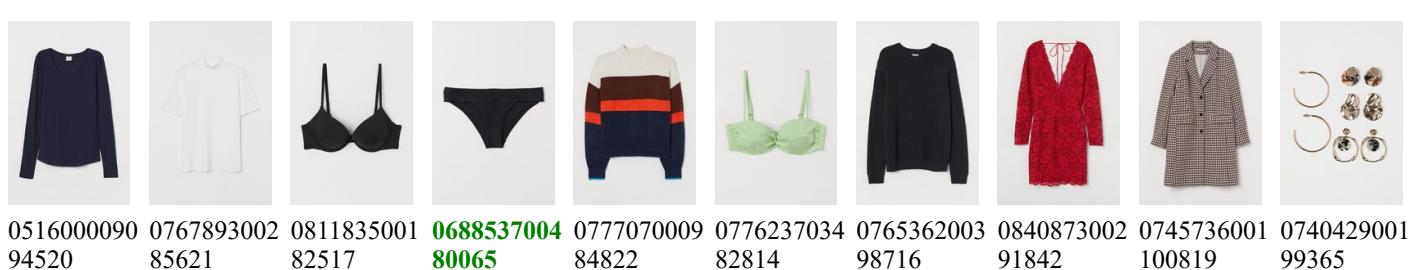
postal\_code f49ac7d8eda78e3736a1827e22119bc273b39ab83128af...

Name: 00111614ae738d0b5241b561b61d1d639e2ac2f4da7563b2444ccc3462e4025c, dtype: object

### Ground truth + last interactions



### Recommendations



## Top recommendations sample

User: FN NaN  
Active NaN  
club\_member\_status ACTIVE  
fashion\_news\_frequency NONE  
age 23.0  
postal\_code d4be14683db46b784630ef858b37b11cf08352b8014a37...  
Name: 001aeb7fd20499c0babdf05bc81d76b20ce907a64aa6eb7460416056c05382a9, dtype: object

### Ground truth + last interactions



### Recommendations



User: FN NaN  
Active NaN  
club\_member\_status ACTIVE  
fashion\_news\_frequency NONE  
age 60.0  
postal\_code a0a0be3a942334f5c1e8e9fac3020fe83f11cba8ca0c7e...  
Name: 002e0b61a6fb3425d76f3f222750f60165d44e257226752f97728eb902e4239, dtype: object

### Ground truth + last interactions



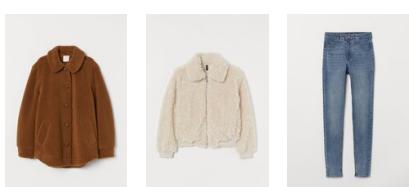
0801673002 0680391030 0688105012 0877274003 0844059001 0843373002 0866731003 0843873004 0767438002 0823168002  
80622 81415 81416 81417 81418 81419 81420 81421 81422 81423



0856617001 0776237030 0843872003 0854043001 0854043004 0811500001 0800691007 0800691008 0846279001 0860949002  
81424 81425 81426 81427 81428 81429 81430 81431 81432 81433

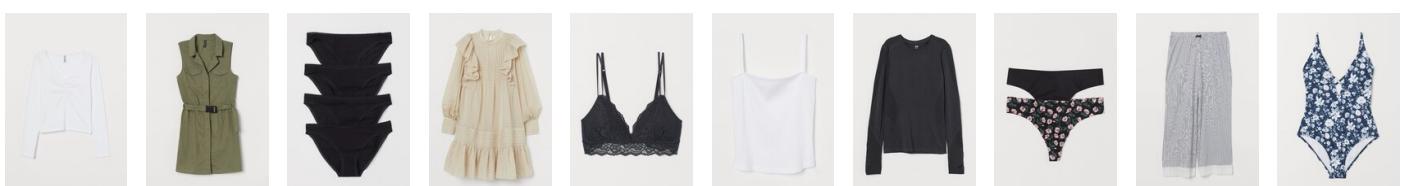


0725662002 0725663002 0832732002 0865073002 0791587007 0739529002 0675068003 0679853030 0779068002 0560047002  
81434 81435 81436 81437 81438 81439 81440 81441 81442 81443



0794779001 0740215006 0706016002  
81444 81445 80124

## Recommendations



0801673002 0859081003 0594987002 0885617002 0821397007 0826205002 0740927001 0470789028 0769838001 0759327005  
80622 103889 85724 82527 93008 91139 89476 83554 102498 105262

User: FN NaN

Active NaN

club\_member\_status ACTIVE

fashion\_news\_frequency NONE

age 33.0

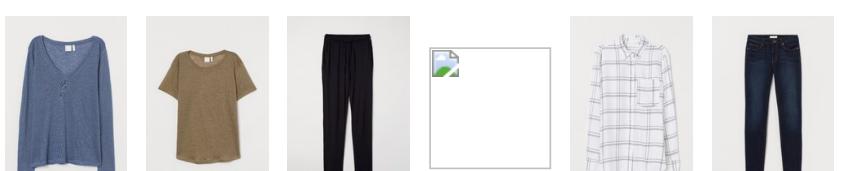
postal\_code 22a1cb7106dcf891af55846e93aa4d2a7697fb6ae53b52...

Name: 003cbebf7fa9783dfaec0c0f7b0ccca210d4ebb42be547d93e0e8e91246c370, dtype: object

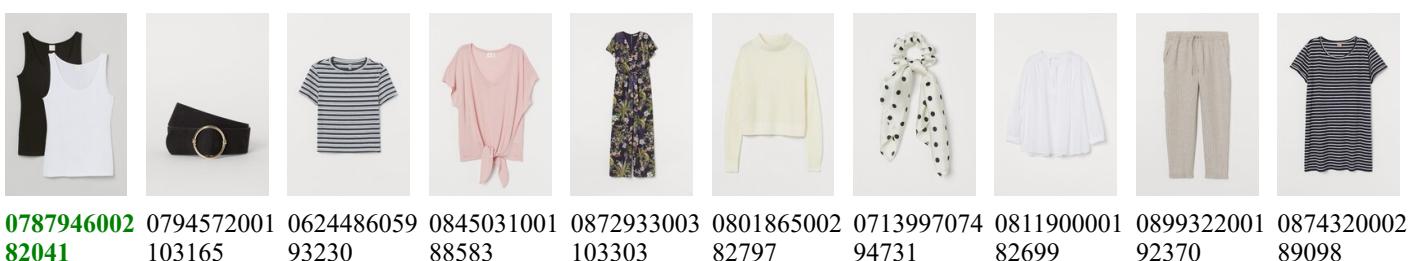
## Ground truth + last interactions



0787946002 0871517002 0871707005 0554598070 0918149002 0817067003 0816938006 0887806001 0837306001 0610776083  
82041 82042 82043 82044 82045 82046 82047 82048 81167 82049



### Recommendations



User: FN 1.0

Active 1.0

club\_member\_status ACTIVE

fashion\_news\_frequency Regularly

age 34.0

postal\_code e6ec04a6aceca0843a090960b43f8982507e09089e9f12...

Name: 004a51b9de9d21672dc80ff5b76928b83e0865f614c7a3170fe0f7129a53161, dtype: object

### Ground truth + last interactions



## Recommendations



0794575005 0714620007 0927530005 0857279001 0874754002 0832331003 0821838001 0910654001 0771557001 0748566030  
80822 84880 112961 97578 85309 82771 81218 89591 86237 85913

User: FN NaN

Active NaN

club\_member\_status ACTIVE

fashion\_news\_frequency NONE

age 25.0

postal\_code fcbea010f98d148804adfdec6e13877d006cf37ef247cf...

Name: 00528f1e60e00d109ad87e030f11abc1d6d26da06c00694ec7a7e6e9b125c90, dtype: object

## Ground truth + last interactions



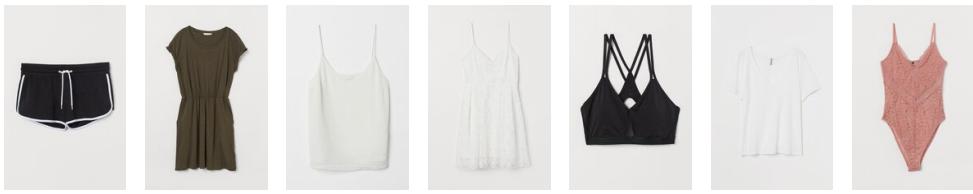
0757303012 0810838010 0896559001 0852174003 0542464001 0832527002 0861471001 0811925001 0833493002 0776237034  
82667 80458 82809 82810 82811 80652 82812 82813 80655 82814



0806225008 0811927001 0684212002 0822946002 0749407002 0768189002 0599580086 0834217009 0599580038 0411413023  
82815 82816 82817 82818 82819 82820 82821 82822 82823 82824



0541518004 0771733001 0793526001 0751530002 0822926001 0749699013 0464927008 0764998003 0603584019 0754413002  
82825 82826 82827 82828 82829 82830 82831 82832 82833 82834



0754176001 0554811029 0712216005 0717085003 0712711001 0718278002 0809357002  
82835 82836 82837 82838 82839 82840 82841

## Recommendations



**0757303012** 0799417004 0852746001 0824337002 0816586002 0696587001 0495685001 0564786001 0573085040 0737222001  
**82667** 80813 80924 80292 82951 82345 95901 82083 91002 95543

## Predictions without GT sample

User: FN 1.0

Active 1.0

club\_member\_status ACTIVE

fashion\_news\_frequency Regularly

age 23.0

postal\_code bacfcdbbe53353eb7c558122cf94382858d813abef3a90...

Name: 00130faf36f2571cf7e08451b317545004a8a85327661ffe0f78d4728047d74f, dtype: object

### Ground truth + last interactions



### Recommendations



User: FN 1.0

Active 1.0

club\_member\_status ACTIVE

fashion\_news\_frequency Regularly

age 21.0

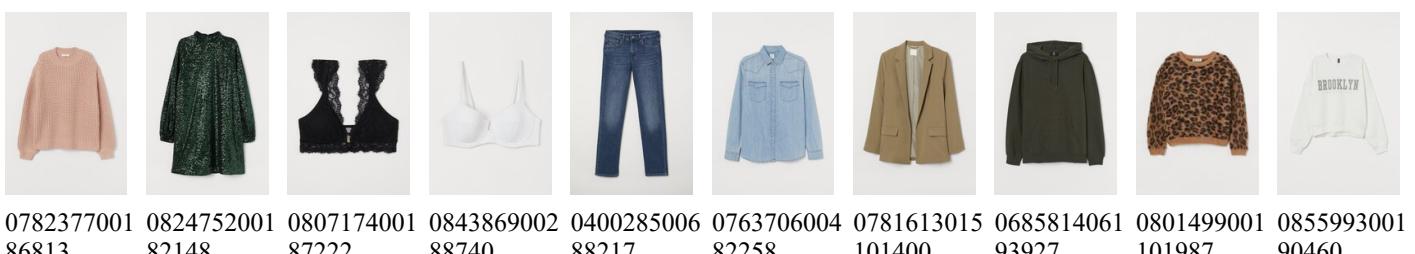
postal\_code 77d01d7a5cf3801525dd923345e47d079fea7dc14dcfc...

Name: 00155b2ef48cfb5d2fce4642f670f151efe0747542a5b946580684cd2c6093c7, dtype: object

### Ground truth + last interactions



## Recommendations



User: FN NaN

Active NaN

club\_member\_status ACTIVE

fashion\_news\_frequency NONE

age 26.0

postal\_code 53e065efe49a0d3ccbac3e05d8556c17c9125ed69b133f...

Name: 0015f37f752a41a75c3be6f3f92deedc4c87d039f1758ec41f54f8c7f4729793, dtype: object

## Ground truth + last interactions





0844745001 0842952001 0852513004 0562613010 0789303003 0697054052 0697054056 0697054054 0751471001 0706016001  
80775 80776 80777 80778 80779 80780 80781 80782 80258 80783



0773955001  
80784

### Recommendations



0750398005 0824767001 0820542013 0831961002 0820870002 0826203002 0809549002 0771297002 0699423001 0888571001  
88623 83405 84091 81871 80706 83987 88489 105818 96175 90295

User: FN NaN

Active NaN

club\_member\_status ACTIVE

fashion\_news\_frequency NONE

age 39.0

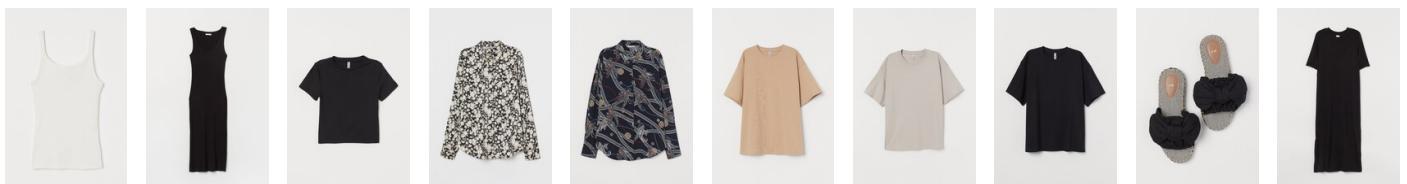
postal\_code 84241c94f2a30bf46e1eaa8f16505056861246ab0921d2...

Name: 00161807b400646237229582e0d2333ef150881037858be8424b5e8202d06ddb, dtype: object

### Ground truth + last interactions



0907807001 0902358002 0570002002 0863587002 0887937001 0870970001 0796234003 0748269009 0941005005 0941005003  
80785 80786 80787 80788 80789 80790 80791 80792 80793 80794



0863937003 0732671001 0624486001 0695632113 0695632090 0806388005 0806388003 0806388001 0808631001 0879294001  
80795 80796 80797 80798 80799 80740 80800 80286 80801 80802



0836551001 0880839002 0779871009 0836551006 0808631003 0806131004 0815092005 0724906009 0790096003 0852748001  
80803 80804 80805 80454 80806 80807 80808 80809 80500 80810

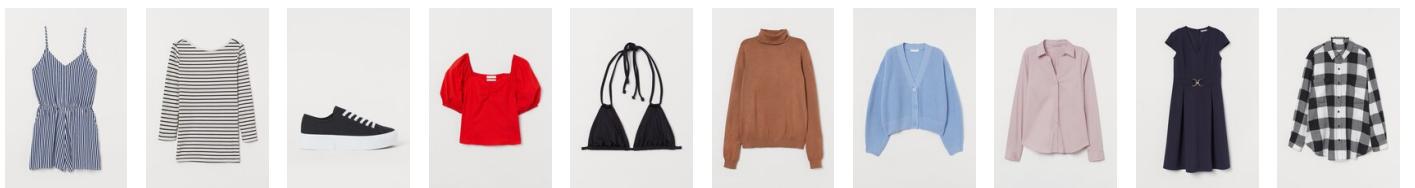


0448509027 0776746005 0799417004 0805689001 0802490002 0802490001 0855857001 0743616001 0523490001 0842245003  
80811 80812 80813 80814 80815 80816 80817 80818 80819 80820



0723675002 0794575005 0811198001 0762143001  
80821 80822 80823 80623

### Recommendations



0895582003 0758226003 0843498003 0887542001 0736592003 0673677011 0916468003 0507909030 0859121001 0868874006  
98626 82945 81149 90133 92895 83163 82119 89185 106348 95923

User: FN NaN

Active NaN

club\_member\_status ACTIVE

fashion\_news\_frequency NONE

age 25.0

postal\_code f8a21e340ea6013c7b5fe5604a0fcdb09f1c755bbd14c4...

Name: 00190ae87b184c5a8886a6024c043275e883636c238fad618497026cfed97b3c, dtype: object

### Ground truth + last interactions



0912204009 0823118002 0823168006 0811907011 0879944002 0823168008 0879999001 0851546002 0857812002 0721435001  
80824 80825 80826 80827 80828 80829 80830 80831 80329 80832



0698276006 0739819009 0732060001 0556539010 0810838010 0749400010 0841807003 0794320001 0856732001 0826498004  
80833 80232 80834 80835 80458 80836 80837 80838 80839 80840

### Recommendations





0816166005 0825600002 0779725006 0693242013 0860260001 0599489001 0760454002 0757906005 0902288002 0798952007  
81252 81810 81376 92994 82724 84496 99200 80469 101272 92538