

# 쇼핑몰 추천 시스템 구상하기

```
CREATE TABLE
`coral-mechanism-464902-i4.modulabs_project.amazon_cleaned`
#rating에서 |을 제외한 테이블 생성
SELECT
*,CAST(rating AS FLOAT64) AS rating_flo
FROM
`coral-mechanism-464902-i4.modulabs_project.amazon`
WHERE
SAFE_CAST(rating AS FLOAT64) IS NOT NULL;
```

## 쿼리 결과

작업 정보   **결과**   실행 세부정보   실행 그래프

**i** 이 문으로 이름이 amazon\_cleaned인 새 테이블이 생성되었습니다.

### • 추천시스템1

#### 1. BEST 제품 추천 시스템

2. 테마: 믿고 사는 베스트 제품! 평점과 평점 수가 일정 기준(4.5/5200건) 이상을 충족하는 제품 중에서 평점과 평점 수가 좋은 순으로 제품을 추천합니다. 평점의 상위 5%값이 4.5, 평점 수의 중앙값이 5179건으로 평점이 상위 5%면서 평점 수도 중앙값 이상인 제품을 고객 만족도가 높은 베스트 제품이라고 판단해 이 조건을 충족하는 제품을 뽑아 추천합니다.

핵심 질문: 많은 사람들이 사용하고도 평점이 높은 제품은 될까?

주요 재료: rating, rating\_flo(평점에서 |을 삭제해 float로 변환한 평점 칼럼), rating\_count

#### 3. 구현 로직

```
SELECT AVG(rating_flo),#평균
(SELECT PERCENTILE_CONT(rating_flo, 0.5) OVER()
FROM `coral-mechanism-464902-i4.modulabs_project.amazon_cleaned`
LIMIT 1
) AS median_raing_flo #중앙값
FROM `coral-mechanism-464902-i4.modulabs_project.amazon_cleaned`
```

```
SELECT AVG(rating_flo),
(SELECT PERCENTILE_CONT(rating_flo, 0.95) OVER()
FROM `coral-mechanism-464902-i4.modulabs_project.amazon_cleaned`
LIMIT 1
) AS median_raing_flo #95% 해당값
FROM `coral-mechanism-464902-i4.modulabs_project.amazon_cleaned`
```

## 쿼리 결과

작업 정보   **결과**   차트   JSON   실행

행	rating_flo	median_raing_flo
1	4.096584699453...	4.1

쿼리 결과			
작업 정보		결과	차트
JSON		실행 세부정보	
행	f0_	median_raing_flo	
1	4.096584699453...	4.5	

```

SELECT
  AVG(rating_count) AS avg_rating, #평균
  MIN(rating_count) AS min_rating, #최소
  MAX(rating_count) AS max_rating, #최대
  (SELECT PERCENTILE_CONT(rating_count, 0.5) OVER() #중앙값
   FROM `coral-mechanism-464902-i4.modulabs_project.amazon_cleaned`
   LIMIT 1
  ) AS median_rating
FROM
  `coral-mechanism-464902-i4.modulabs_project.amazon_cleaned`;

```

쿼리 결과					
작업 정보		결과	차트	JSON	실행 세부정보
실행 그래프					
행	avg_rating	min_rating	max_rating	median_rating	
1	18307.37688098...	2	426973	5179.0	

```

SELECT *
FROM `coral-mechanism-464902-i4.modulabs_project.amazon_cleaned`
WHERE rating_flo >= 4.5
AND rating_count >= 5200
ORDER BY rating_flo DESC

```

#### 4. 결과

평점 95% 구간에 해당하는 4.5 이상이면서 평점 수 중앙값 이상을 조건으로 설정해 출력한 결과, 48건의 제품이 추출되었습니다. 상품 리스트를 평점 기준 내림차순으로 배열했습니다.

쿼리 결과									
작업 정보		결과	차트	JSON	실행 세부정보		실행 그래프		
행	product_id	product_name	category	discounted_price	actual_price	discount_percent	rating	rating_count	about_product
1	BOBR4F87BQ	Swiffer Instant Electric Water Heater Faucet Tap Home Kitchen Instantaneous Water Heater Tank less for Tap, LED Electric Head Water	Home&KitchenHeating,Cooling&AirQualityWaterHeaters&GeyersInstantWaterHeaters	1439.0	1999.0	0.28	4.8	53803	✓Quick Electric Hot Wat Heating tube: high-purity copper liner heating eler Rated voltage: 220V/50I Rated Power: 3000W/✓
2	B0WNN3SRC7	Sony Bravia 164 cm (65 inches) 4K Ultra HD Smart LED Google TV KD-65X74K (Black)	ElectronicsHomeTheater,TV&VideoTelevisionsSmartTelevisions	77990.0	139900.0	0.44	4.7	5935	Resolution: 4K Ultra HD x 2160   Refresh Rate: 60Hz   178 Degree wide viewing angle

524	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
product_id	product_name	category	discount	actual_price	discount_percent	rating	rating_count	about_product	user_id	user_name	review_id	review_title	review_content	img_link	product_link	rating_flo	
1	B08P4F71Q2	Batter Instant C Home&Kitchen	1459	1999	0.28 4.5	53903	<Quick Electric	ASD7D7AFEL42	Yogita g	Amazon	R20W4MPS1P	Best Product	It's Must buy best	<a href="https://m.media-amazon.com/images/I/51WtYtYtYtYt.jpg">https://m.media-amazon.com/images/I/51WtYtYtYtYt.jpg</a>	<a href="https://www.amazon.in/dp/B08P4F71Q2">https://www.amazon.in/dp/B08P4F71Q2</a>	4.3	
2	B0823W7WVW	Spigen EZ Fit T4 ElectronicsMob	999	2999	0.60 4.7	7779	Compatibility: G	AGQXFPFHABU	Rishi Prash	R13GCIUQ1D8	Easy to install	B It is easy to instal	<a href="https://m.media-amazon.com/images/I/51WtYtYtYtYt.jpg">https://m.media-amazon.com/images/I/51WtYtYtYtYt.jpg</a>	<a href="https://www.amazon.in/dp/B0823W7WVW">https://www.amazon.in/dp/B0823W7WVW</a>	4.7		
3	B09WASRQ7C	Sony Bravia 4K ElectronicsHom	77990	139600	0.44 4.7	5935	Resolution: 4K	AFR4ZQ1YXRP2	David P.Dr	ATL R18HCZWT1R	Product instalat	The delivery pec	<a href="https://m.media-amazon.com/images/I/51WtYtYtYtYt.jpg">https://m.media-amazon.com/images/I/51WtYtYtYtYt.jpg</a>	<a href="https://www.amazon.in/dp/B09WASRQ7C">https://www.amazon.in/dp/B09WASRQ7C</a>	4.7		
4	B09NFD0E7Q	Logitech G432 T Computers&Co	1995	2395	0.31 4.6	10780	HIGH SPEED T	AFJLGPQPC6T	Madhavi Ashoka	R20M9KVEVXN1	very nice design	its really good pi	<a href="https://m.media-amazon.com/images/I/51WtYtYtYtYt.jpg">https://m.media-amazon.com/images/I/51WtYtYtYtYt.jpg</a>	<a href="https://www.amazon.in/dp/B09NFD0E7Q">https://www.amazon.in/dp/B09NFD0E7Q</a>	4.6		
5	B01M2Q3AB4	Logitech M331 C Computers&Co	1295	1945	0.21 4.6	12375	Quietest Click-L	ASB7TPY5BAK1	Ayeshaa Shree	R17S2JAWF1H1	Good but the so	« excellent piece o	<a href="https://m.media-amazon.com/images/I/51WtYtYtYtYt.jpg">https://m.media-amazon.com/images/I/51WtYtYtYtYt.jpg</a>	<a href="https://www.amazon.in/dp/B01M2Q3AB4">https://www.amazon.in/dp/B01M2Q3AB4</a>	4.6		
6	B08244H4B3	Spigen EZ Fit T4 ElectronicsMob	999	2399	0.60 4.6	6129	Compatibility: G	AHJCJDEQARI	Prabhat Chauh	R3C2WT83D0C5	Best For it's Mo	It's A Good Func	<a href="https://m.media-amazon.com/images/I/51WtYtYtYtYt.jpg">https://m.media-amazon.com/images/I/51WtYtYtYtYt.jpg</a>	<a href="https://www.amazon.in/dp/B08244H4B3">https://www.amazon.in/dp/B08244H4B3</a>	4.6		
7	B07ZLZ3Z3C	Logitech Pebble Computers&Co	1490	2290	0.35 4.6	10952	Modern, slim an	ASD9ND333MC	Rawi ShreyDee	R1709PTZDIX0	Streak and batter	It's a good buile	<a href="https://m.media-amazon.com/images/I/51WtYtYtYtYt.jpg">https://m.media-amazon.com/images/I/51WtYtYtYtYt.jpg</a>	<a href="https://www.amazon.in/dp/B07ZLZ3Z3C">https://www.amazon.in/dp/B07ZLZ3Z3C</a>	4.6		
8	B01J1H5FQ6	Redgear MP34 T Computers&Co	299	550	0.40 4.6	53434	Speed-Type surr	ASGLARJ2H2D4	Jayaprakash Na	R20M9KVEVXN1	Good product O	Quality of produ	<a href="https://m.media-amazon.com/images/I/51WtYtYtYtYt.jpg">https://m.media-amazon.com/images/I/51WtYtYtYtYt.jpg</a>	<a href="https://www.amazon.in/dp/B01J1H5FQ6">https://www.amazon.in/dp/B01J1H5FQ6</a>	4.6		
9	B086RTJ1HM	Spigen EZ Fit T4 ElectronicsMob	999	2399	0.60 4.6	26903	Compatibility: G	AFD7TJCS8QHE	Adul Niaz-Rup	RE1R93V18P1P	Easy to instal fo	I used my 51 pr	<a href="https://m.media-amazon.com/images/I/51WtYtYtYtYt.jpg">https://m.media-amazon.com/images/I/51WtYtYtYtYt.jpg</a>	<a href="https://www.amazon.in/dp/B086RTJ1HM">https://www.amazon.in/dp/B086RTJ1HM</a>	4.6		
10	B08K5MR22	Sujata Dynamix Home&Kitchen	6120	8478	0.28 4.6	6550	Warranty, 2 year	AHNCY5SLPC1	Amazon Custom	R20M7YKPMX	Best mixer,Best	Best mixer as oc	<a href="https://m.media-amazon.com/images/I/51WtYtYtYtYt.jpg">https://m.media-amazon.com/images/I/51WtYtYtYtYt.jpg</a>	<a href="https://www.amazon.in/dp/B08K5MR22">https://www.amazon.in/dp/B08K5MR22</a>	4.6		
11	B08C4Z9ZLN	Crucial RAM 8G Computers&Co	1792	3500	0.49 4.5	26104	Improve your sy	AHT3PN444C1	Riz Akshat Nehr	R3K0LZ5E0F1P	PPS increased i	I installed it in m	<a href="https://m.media-amazon.com/images/I/51WtYtYtYtYt.jpg">https://m.media-amazon.com/images/I/51WtYtYtYtYt.jpg</a>	<a href="https://www.amazon.in/dp/B08C4Z9ZLN">https://www.amazon.in/dp/B08C4Z9ZLN</a>	4.5		
12	B07G33YNLJB	Crucial BX500 2 Computers&Co	1815	3100	0.41 4.5	62625	240GB 2.5-inch	AGHWHJGEPJ	Shanki Pasari	R21W4WR8QD5	Absolutely worth	After 1 changed	<a href="https://m.media-amazon.com/images/I/51WtYtYtYtYt.jpg">https://m.media-amazon.com/images/I/51WtYtYtYtYt.jpg</a>	<a href="https://www.amazon.in/dp/B07G33YNLJB">https://www.amazon.in/dp/B07G33YNLJB</a>	4.5		
13	B08N413C9W	AmazonBasics Computers&Co	299	800	0.83 4.5	74977	Two 3.5-foot (1	14GBX233C7B71	Pravin Kumar M	R1C8M4JUEX1K	Nice,good,Paiss	Sufficient length	<a href="https://m.media-amazon.com/images/I/51WtYtYtYtYt.jpg">https://m.media-amazon.com/images/I/51WtYtYtYtYt.jpg</a>	<a href="https://www.amazon.in/dp/B08N413C9W">https://www.amazon.in/dp/B08N413C9W</a>	4.5		
14	B08LZLQ624	Classmate Soft OfficeProducts(C	157	100	0.02 4.5	8018	The cover desig	AF3GTE7W8G	Anirban B.Amli	R2QV1JDEV8C1	An Overall Goo	First Of all, the il	<a href="https://m.media-amazon.com/images/I/51WtYtYtYtYt.jpg">https://m.media-amazon.com/images/I/51WtYtYtYtYt.jpg</a>	<a href="https://www.amazon.in/dp/B08LZLQ624">https://www.amazon.in/dp/B08LZLQ624</a>	4.5		
15	B075ZL3L7V	Casio MJ-120 T OfficeProducts(C	440	440	0 4.5	8810	Regular keys th	AFCKVQFPM4C	Dipu Kayumud	R352WPN21021	Very easy to use	Very good,Nice	<a href="https://m.media-amazon.com/images/I/51WtYtYtYtYt.jpg">https://m.media-amazon.com/images/I/51WtYtYtYtYt.jpg</a>	<a href="https://www.amazon.in/dp/B075ZL3L7V">https://www.amazon.in/dp/B075ZL3L7V</a>	4.5		
16	B08W4119XK	AmazonBasics Computers&Co	299	695	0.7 4.5	107887	One 6-foot-long	AEYHTOWWEY	Shiva Libal kotta	R2AE3BNZV58F	Functionality as	Using it and sat	<a href="https://m.media-amazon.com/images/I/51WtYtYtYtYt.jpg">https://m.media-amazon.com/images/I/51WtYtYtYtYt.jpg</a>	<a href="https://www.amazon.in/dp/B08W4119XK">https://www.amazon.in/dp/B08W4119XK</a>	4.5		
17	B08N411FEY	AmazonBasics Computers&Co	199	750	0.73 4.5	74979	One 6-foot-long	AE8323C7B71	Pravin Kumar M	R1C8M4JUEX1K	Nice,good,Paiss	Sufficient length	<a href="https://m.media-amazon.com/images/I/51WtYtYtYtYt.jpg">https://m.media-amazon.com/images/I/51WtYtYtYtYt.jpg</a>	<a href="https://www.amazon.in/dp/B08N411FEY">https://www.amazon.in/dp/B08N411FEY</a>	4.5		
18	B07R8N8VBQ	Gigaz Essential Home&Improvem	249	599	0.58 4.5	5685	Gigaz Essential	AED9NCPUEE	Chinesth Kumar A	R3L1T1SL8C33	Very useful prod	I have lot of cabi	<a href="https://m.media-amazon.com/images/I/51WtYtYtYtYt.jpg">https://m.media-amazon.com/images/I/51WtYtYtYtYt.jpg</a>	<a href="https://www.amazon.in/dp/B07R8N8VBQ">https://www.amazon.in/dp/B07R8N8VBQ</a>	4.5		
19	B07658T1H7	Gigaz Essential Computers&Co	199	599	0.57 4.5	13588	Compatible: Wd	AESJL4N2G2W	Dhrendra Chns	RZ2WETD4N1	Good No Probl	Case is hard an	<a href="https://m.media-amazon.com/images/I/51WtYtYtYtYt.jpg">https://m.media-amazon.com/images/I/51WtYtYtYtYt.jpg</a>	<a href="https://www.amazon.in/dp/B07658T1H7">https://www.amazon.in/dp/B07658T1H7</a>	4.5		
20	B0118B9KAC	Golmeadi Cui ElectronicsMob	69	171	0.42 4.5	11339	LED indicator,T	AFPCJCEUEV	Pauli Amazon C	R3M4QME18H1P	Good product o	Product is jst a	<a href="https://m.media-amazon.com/images/I/51WtYtYtYtYt.jpg">https://m.media-amazon.com/images/I/51WtYtYtYtYt.jpg</a>	<a href="https://www.amazon.in/dp/B0118B9KAC">https://www.amazon.in/dp/B0118B9KAC</a>	4.5		
21	B0830CDRWR	Havells Aqua P1 Home&Kitchen	1025	2395	0.40 4.5	23484	Auto shut off fu	AE42COB4BK6	neeraj vashisht	JR28QMP3RH4F	Good product,G	Good product,TI	<a href="https://m.media-amazon.com/images/I/51WtYtYtYtYt.jpg">https://m.media-amazon.com/images/I/51WtYtYtYtYt.jpg</a>	<a href="https://www.amazon.in/dp/B0830CDRWR">https://www.amazon.in/dp/B0830CDRWR</a>	4.5		
22	B08L789MPP	Logitech G102 C Computers&Co	1495	1995	0.25 4.5	10541	COLORFUL LIG	AH4ZFSJAXDQ5	Hitesh Deepak,c	R138R9Z3XMA	Go for it, but the	This turned out i	<a href="https://m.media-amazon.com/images/I/51WtYtYtYtYt.jpg">https://m.media-amazon.com/images/I/51WtYtYtYtYt.jpg</a>	<a href="https://www.amazon.in/dp/B08L789MPP">https://www.amazon.in/dp/B08L789MPP</a>	4.5		
23	B0148P4P49	Logitech X350 T Computers&Co	2640	3195	0.17 4.5	16148	Multi-Device Co	AETD7JALZ8T1	Padmanathan F	R28Q2Z2V7FH	Convenience pr	So I got this key	<a href="https://m.media-amazon.com/images/I/51WtYtYtYtYt.jpg">https://m.media-amazon.com/images/I/51WtYtYtYtYt.jpg</a>	<a href="https://www.amazon.in/dp/B0148P4P49">https://www.amazon.in/dp/B0148P4P49</a>	4.5		
24	B0841Q8MQ2	Logitech M235 T Computers&Co	699	995	0.13 4.5	54495	You can surf the	AGDQL465FMC	Chandrasekar	R28ZD7U4MBF	Good silent mou	It's little small fo	<a href="https://m.media-amazon.com/images/I/51WtYtYtYtYt.jpg">https://m.media-amazon.com/images/I/51WtYtYtYtYt.jpg</a>	<a href="https://www.amazon.in/dp/B0841Q8MQ2">https://www.amazon.in/dp/B0841Q8MQ2</a>	4.5		
25	B071V4HMZ2	Philips Daily Col Home&Kitchen	2095	2095	0 4.5	7949	Frequency: 50-4	AH3C3OLYU04	Joydeep Bhattach	R18OC1M5ERX	Good toaster,Se	Works as said. E	<a href="https://m.media-amazon.com/images/I/51WtYtYtYtYt.jpg">https://m.media-amazon.com/images/I/51WtYtYtYtYt.jpg</a>	<a href="https://www.amazon.in/dp/B071V4HMZ2">https://www.amazon.in/dp/B071V4HMZ2</a>	4.5		
26	B08X7D7YD4	SanDisk Extrem Electronics&Co	939	1800	0.48 4.5	20592	Save time with c	AE8XBA27W5	Asadi Fayez Nail	R3Q4Q85N4P1	Just gets the job	The write speed	<a href="https://m.media-amazon.com/images/I/51WtYtYtYtYt.jpg">https://m.media-amazon.com/images/I/51WtYtYtYtYt.jpg</a>	<a href="https://www.amazon.in/dp/B08X7D7YD4">https://www.amazon.in/dp/B08X7D7YD4</a>	4.5		
27	B086Z7VJ2	Ely Aluminum A ElectronicsMob	314	1499	0.79 4.5	28978	Multi-angle adg	AGD9VWYRPLM	Drain John Said	R35G8ZLMN1P	Good one,Almo	Good quality. Ca	<a href="https://m.media-amazon.com/images/I/51WtYtYtYtYt.jpg">https://m.media-amazon.com/images/I/51WtYtYtYtYt.jpg</a>	<a href="https://www.amazon.in/dp/B086Z7VJ2">https://www.amazon.in/dp/B086Z7VJ2</a>	4.5		
28	B08405C6P6	Casio FX-991EX OfficeProducts(C	1295	1295	0 4.5	5790	Redesigned ES	AFES59MBN8C	Vijaya s. Gouth	R2MYH4YR8Q4	Nice,Good and i	It is very easy to	<a href="https://m.media-amazon.com/images/I/51WtYtYtYtYt.jpg">https://m.media-amazon.com/images/I/51WtYtYtYtYt.jpg</a>	<a href="https://www.amazon.in/dp/B08405C6P6">https://www.amazon.in/dp/B08405C6P6</a>	4.5		
29	B07TMXCRFV	ESR Screen Prc Computers&Co	1234	1599	0.23 4.5	10880	Compatibility: co	AG5AXXAJDTP	Aditya Kumar A	R35Z2TJL4B	Good product, s	It is good and fr	<a href="https://m.media-amazon.com/images/I/51WtYtYtYtYt.jpg">https://m.media-amazon.com/images/I/51WtYtYtYtYt.jpg</a>	<a href="https://www.amazon.in/dp/B07TMXCRFV">https://www.amazon.in/dp/B07TMXCRFV</a>	4.5		
30	B07Q4QV1DL	ELV Aluminum J ElectronicsMob	299	1499	0.82 4.5	28978	Multi-angle adg	AGD9VWYRPLM	Shanki John Said	R35G8ZLMN1P	Good one,Almo	Good quality. Ca	<a href="https://m.media-amazon.com/images/I/51WtYtYtYtYt.jpg">https://m.media-amazon.com/images/I/51WtYtYtYtYt.jpg</a>	<a href="https://www.amazon.in/dp/B07Q4QV1DL">https://www.amazon.in/dp/B07Q4QV1DL</a>	4.5		
31	B08LJ17H4	Cameo Oil Paste Home&Kitchen	230	230	0 4.5	9427	10 assorted sha	AF3R4BP1D1C	Jayanta Hensari	R14LST7RADF	Good product O	Good product. c	<a href="https://m.media-amazon.com/images/I/51WtYtYtYtYt.jpg">https://m.media-amazon.com/images/I/51WtYtYtYtYt.jpg</a>	<a href="https://www.amazon.in/dp/B08LJ17H4">https://www.amazon.in/dp/B08LJ17H4</a>	4.5		
32	B08N4119XK	AmazonBasics Computers&Co	299	695	0.7 4.5	107888	One 6-foot-long	AEYHTOWWEY	Shiva Libal kotta	R2AE3BNZV58F	Functionality as	Using it and sat	<a href="https://m.media-amazon.com/images/I/51WtYtYtYtYt.jpg">https://m.media-amazon.com/images/I/51WtYtYtYtYt.jpg</a>	<a href="https://www.amazon.in/dp/B08N4119XK">https://www.amazon.in/dp/B08N4119XK</a>	4.5		
33	B08FYB9H+K	TP-Link UE300C Computers&Co	1199	1999	0 4.5	22420	Ideal for laptop	AHQCZ75WWM	MOINUL H.Jay	R3D5W8U6K7F	Easy to use,Wo	Good looking an	<a href="https://m.media-amazon.com/images/I/51WtYtYtYtYt.jpg">https://m.media-amazon.com/images/I/51WtYtYtYtYt.jpg</a>	<a href="https://www.amazon.in/dp/B08FYB9H+K">https://www.amazon.in/dp/B08FYB9H+K</a>	4.5		
34	B07DJLJFPC	SanDisk Ultra AI Electronics&Gen	299	315	0.15 4.5	17810	Lasts up to 100	AFPSD9M7P1P	Asadi InqilA RAI	R3N1W4RQ2ME	Longevity isn't a	I used these for	<a href="https://m.media-amazon.com/images/I/51WtYtYtYtYt.jpg">https://m.media-amazon.com/images/I/51WtYtYtYtYt.jpg</a>	<a href="https://www.amazon.in/dp/B07DJLJFPC">https://www.amazon.in/dp/B07DJLJFPC</a>	4.5		
35	B0846SDGDU	TP-Link UE300 T Computers&Co	1099	1999	0.42 4.5	22420	Fastest USB 3.1	AHQCZ75WWM	MOINUL H.Jay	R3D5W8U6K7F	Easy to use,Wo	Good looking an	<a href="https://m.media-amazon.com/images/I/51WtYtYtYtYt.jpg">https://m.media-amazon.com/images/I/51WtYtYtYtYt.jpg</a>	<a href="https://www.amazon.in/dp/B0846SDGDU">https://www.amazon.in/dp/B0846SDGDU</a>	4.5		
36	B071113J7M	Sujata Powermix Home&Kitchen	5890	7508	0.22 4.5	7241	Centrifugal Juic	AHR8VRVQV4T	Nadira Naminder	R20WE8XJR33C	Need be careful	disadvantages-	<a href="https://m.media-amazon.com/images/I/51WtYtYtYtYt.jpg">https://m.media-amazon.com/images/I/51WtYtYtYtYt.jpg</a>	<a href="https://www.amazon.in/dp/B071113J7M">https://www.amazon.in/dp/B071113J7M</a>	4.5		
37	B0145Z06Y2	Duracell Ultra AI Electronics&Gen	299	315	0.19 4.5	28930	Lasts up to 100	AF3T5W8E8J4	Gopinathan Pun	R31X4XZTGYD1	That's a nice on	Nice one, tried o	<a href="https://m.media-amazon.com/images/I/51WtYtYtYtYt.jpg">https://m.media-amazon.com/images/I/51WtYtYtYtYt.jpg</a>	<a href="https://www.amazon.in/dp/B0145Z06Y2">https://www.amazon.in/dp/B0145Z06Y2</a>	4.5		
38	B08V8Z83D0	Cameo Artist Ai Home&Kitchen	310	310	0 4.5	5882	Set of 12 assor	AF8Y8Y8EJ8J	Dritya daniel PO	R37D1AHV4Z8	Nice,Low time th	us https://m.media-	<a href="https://m.media-amazon.com/images/I/51WtYtYtYtYt.jpg">https://m.media-amazon.com/images/I/51WtYtYtYtYt.jpg</a>	<a href="https://www.amazon.in/dp/B08V8Z83D0">https://www.amazon.in/dp/B08V8Z83D0</a>	4.5		
39	B084ZLLJ09	Seagate One To Computers&Co	5799	7999	0.28 4.5	6273	Digital Storage	(AG7XPN5DQJ	Amazon Custom	R20Y2B7S122	sometimes write	https://m.media-	<a href="https://m.media-amazon.com/images/I/51WtYtYtYtYt.jpg">https://m.media-amazon.com/images/I/51WtYtYtYtYt.jpg</a>	<a href="https://www.amazon.in/dp/B084ZLLJ09">https://www.amazon.in/dp/B084ZLLJ09</a>	4.5		
40	B08Y8BOH+K	TP-Link UE300C Computers&Co	1199	1999	0 4.5	50810	Digital Storage	(AFWREBMRJX	Pallavi Varun Ar	R2BY8BOB15JC	Good gud,Hard	Good one. gud I	<a href="https://m.media-amazon.com/images/I/51WtYtYtYtYt.jpg">https://m.media-amazon.com/images/I/51WtYtYtYtYt.jpg</a>	<a href="https://www.amazon.in/dp/B08Y8BOH+K">https://www.amazon.in/dp/B08Y8BOH+K</a>	4.5		
41	B07HJ4JF52	Dell MS116 100 Computers&Co	299	500	0.54 4.5	33170	Movement Deta	AH4ZPNLZJW	Mohammad Noo	R2K3BM6M3H	Big in size as o	I'm using this m	<a href="https://m.media-amazon.com/images/I/51WtYtYtYtYt.jpg">https://m.media-amazon.com/images/I/51WtYtYtYtYt.jpg</a>	<a href="https://www.amazon.in/dp/B07HJ4JF52">https://www.amazon.in/dp/B07HJ4JF52</a>	4.5		
42	B084H1VC1Z	Scissors Mouse Computers&Co	699	1995	0.5 4.5	7211	Dimensions: 90	AF7JDDQVQD	Ashray N.Janan	R21K3TQXJD	Nice looking an	This is my first p	<a href="https://m.media-amazon.com/images/I/51WtYtYtYtYt.jpg">https://m.media-amazon.com/images/I/51WtYtYtYtYt.jpg</a>	<a href="https://www.amazon.in/dp/B084H1VC1Z">https://www.amazon.in/dp/B084H1VC1Z</a>	4.5		
43	B08ZC086G6	SanDisk Extrem Electronics&Co	1320	2000	0.54 4.5	19924	Save time with c	AH7HYQZEEA	Prasad Prayal	R13D0ACB451	Good quality prc	Good quality prc	<a href="https://m.media-amazon.com/images/I/51WtYtYtYtYt.jpg">https://m.media-amazon.com/images/I/51WtYtYtYtYt.jpg</a>	<a href="https://www.amazon.in/dp/B08ZC086G6">https://www.amazon.in/dp/B08ZC086G6</a>	4.5		
44	B07ZD8T1JQ	Cuzor 12V Mini Computers&Co	1499	2999	0.5 4.5	8095	Replaceable Bat	AF75TNQZJMSL	Subramanian M	R13D0ACB451	Cute one,Recei	Working as desc	<a href="https://m.media-amazon.com/images/I/51WtYtYtYtYt.jpg">https://m.media-amazon.com/images/I/51WtYtYtYtYt.jpg</a>	<a href="https://www.amazon.in/dp/B07ZD8T1JQ">https://www.amazon.in/dp/B07ZD8T1JQ</a>	4.5		
45	B0883T2110	Belkin Essential ElectronicsPow	1259	1499	0.14 4.5	20588	Maximum Spoke	AG3T7ZF3HJ1	Hayat Ansan,Ba	R10QD1BR4H1	Good product w	Product is excel	<a href="https://m.media-amazon.com/images/I/51WtYtYtYtYt.jpg">https://m.media-amazon.com/images/I/51WtYtYtYtYt.jpg</a>	<a href="https://www.amazon.in/dp/B0883T2110">https://www.amazon.in/dp/B0883T2110</a>	4.5		
46	B07W4119XK	AmazonBasics Computers&Co	199	750	0.73 4.5	74978	One 6-foot-long	AE8323C7B71	Pravin Kumar M	R1C8M4JUEX1K	Nice,good,Paiss	Sufficient length	<a href="https://m.media-amazon.com/images/I/51WtYtYtYtYt.jpg">https://m.media-amazon.com/images/I/51WtYtYtYtYt.jpg</a>	<a href="https://www.amazon.in/dp/B07W4119XK">https://www.amazon.in/dp/B07W4119XK</a>	4.5		
47	B0827GXQ55	AmazonBasics J Computers&Co	999	2100	0.52 4.5	5492	Added Protecto	AECPDWPXOT	Brian Vavassam	R2C48D24F43	Good QUALITY	It works more th	<a href="https://m.media-amazon.com/images/I/51WtYtYtYtYt.jpg">https://m.media-amazon.com/images/I/51WtYtYtYtYt.jpg</a>	<a href="https://www.amazon.in/dp/B0827GXQ55">https://www.amazon.in/dp/B0827GXQ55</a>	4.5		
48	B08NNM7MNE	AirCase Rugged Computers&Co	299	499	0 4.5	21010	Made of Thick,	1AG3NNXG44T	Souradip Naren	R3CK4ZD7S5F	Super,Excellent	Still using,Dearl	<a href="https://m.media-amazon.com/images/I/51WtYtYtYtYt.jpg">https://m.media-amazon.com/images/I/51WtYtYtYtYt.jpg</a>	<a href="https://www.amazon.in/dp/B08NNM7MNE">https://www.amazon.in/dp/B08NNM7MNE</a>	4.5		

Tr	Tr	M3	M3	M3	M3	M3
product_n	rating	rating_ooc	actual_pri	discount	discount_1	rating_flo
rtz [2 Pack] Mini	4.3		4426	4999	294	0.94
LAPSTER 12pcs	4.4		305	999	99	0.9
Elv Mobile Phon	4.3		2351	599	89	0.85
Posh 1.5 Meter	4.3		1237	999	173	0.83
Caldpree Silico	4.3		407	2999	547	0.82
ELV Aluminum A	4.5		28978	1499	269	0.82
Fire-Bolt Phoen	4.3		27704	9999	1999	0.8
Fire-Bolt Phoen	4.3		27696	9999	1998	0.8
Lapster 65W cor	4.5		127	999	199	0.8
Synowite LTG to	5.0		5	1999	399	0.8
LS LAPSTER Qui	4.3		87	999	199	0.8
Aquapure Copp	4.6		124	24999	4999	0.8
Aqua d pure Act	4.5		287	24999	4999	0.8
Fire-Bolt Phoen	4.3		27709	9999	1998	0.8
Corbolt Silicone	4.5		505	1999	399	0.8
SVVO WT 3130	4.3		27139	3990	799	0.8
STRIFF PS2_01	4.3		42641	499	99	0.8
Fire-Bolt Phoen	4.3		27696	9999	1999	0.8
Lapster 65W cor	4.5		127	999	199	0.8
Elv Aluminum A	4.5		28978	1499	314	0.79
Fire-Bolt Vision	4.3		17161	17999	3999	0.78
Amazon Basics	4.4		426973	1400	309	0.78
Robustrion Sma	4.3		5556	2499	549	0.78
Gizga Essentials	4.3		255	299	69	0.77
Dealfreez Case	4.3		4145	1499	349	0.77
STRIFF Adjusta	4.3		24791	1499	349	0.77
Gizga Essentials	4.3		15032	499	119	0.76
Coway Professic	4.4		3837	59900	14400	0.76
Fire-Bolt Vision	4.3		17162	16999	3999	0.76
Fire-Bolt Vision	4.3		17159	16999	3999	0.76
Newly Launched	4.3		240	8499	1999	0.76
Noise_Colorfit	4.5		38	999	249	0.75
REDTECH USB-C	5.0			999	249	0.75
Kyocel Advance	4.5		596	1199	299	0.75
POPO Temporel	4.3		714	599	150	0.75
Starlite Super Sp	4.3		112	999	249	0.75
Instant Pot Air R	4.8		3964	20049	4995	0.75
Fire-Bolt Tank	4.4		768	11999	2999	0.75
Samsung EVO P	4.3		140035	3999	1059	0.74
Amozo Ultra Hyt	4.3		1454	1799	474	0.74
AmazonBasics	4.5		74976	750	199	0.73
Agaro Blaze USE	4.3		14184	595	159	0.73
boAt Laptop, Sm	4.3		20850	999	273.1	0.73
SanDisk Ultra m	4.4		67260	2400	649	0.73
AmazonBasics	4.5		74976	750	199	0.73
Gadgetronics Di	4.5		63	2999	799	0.73
Provenit Copper	4.4		535	19990	5395	0.73
RC PRINT G1 79	4.3		1367	1999	549	0.73
AGARO Blaze US	4.3		14185	495	139	0.72
GILTON Egg Boil	4.3		629	1199	353	0.71

### ● 추천시스템 3

#### 1. 핫한 카테고리 내 인기 제품 추천 시스템

2. 테마: 사람들의 선택은 믿을 수 있다. 평점이 중앙값(4.1) 이상이며, 평점도 작성된 카테고리 제품들을 추려낸 뒤, 사람들이 많이 구매한 상위 카테고리라와 카테고리별 제품 수량을 조합해 탑5 카테고리를 선정했다. 탑5 카테고리별로 평점 수 기준 상위 3개 제품을 선정해 추천한다.

핵심질문: 사람들은 어떤 카테고리에 속한 제품을 주로 사며, 해당 카테고리 내 인기제품은 뭘까?

주요자료: category, rating\_count, COUNT(product\_id)(카테고리별 제품 수량)

#### 3. 구현 로직

```
WITH hot_category AS (
  SELECT product_id, product_name, rating, rating_count, rating_flo,ca
  FROM `coral-mechanism-464902-i4.modulabs_project.amazon_cleaned`,
  UNNEST(SPLIT(category, '|')) AS ca
  WHERE rating_count > 0
  AND rating_flo>4.1),

top5_categories AS (
  SELECT ca, COUNT(product_id) AS product_cnt
  FROM hot_category
  GROUP BY ca
  ORDER BY product_cnt DESC
  LIMIT 5)
SELECT t5.ca AS t5_category,hc.product_name,hc.product_id,hc.rating_flo,hc.rating_count, t5.product_cnt
FROM hot_category AS hc
JOIN top5_categories AS t5
```

ON hc.ca = t5.ca

QUALIFY

ROW\_NUMBER() OVER (PARTITION BY hc.ca ORDER BY hc.rating\_count DESC) <= 3

ORDER BY

t5.product\_cnt DESC,

hc.rating\_flo DESC,

t5.ca ;

#### 4. 결과

CTE로 탑5카테고리, 조건(평점 4.1 초과, 평점 수 0개 초과) 을 만족하는 제품 리스트를 임시테이블로 생성하고 병합해 탑5 카테고리에 해당하는 제품 리스트를 생성했다. 평점 작성 수가 제품 판매수량을 대체할 수 있다고 생각해 탑5카테고리별로 평점 작성 수로 상위 3개 제품을 선정했다. 상위 3개 제품을 카테고리별 제품 수량 내림차순, 평점 내림차순, 카테고리 오름차순으로 우선순위를 지정해 정렬했다.

쿼리 결과 결과 저장 다

작업 정보   결과   차트   JSON   실행 세부정보   실행 그래프

행	t5_category	product_name	product_id	rating_flo	rating_count	product_cnt
1	Computers&Accessories	SanDisk Cruzer Blade 32GB US...	B005FYNT3G	4.3	253105	253
2	Computers&Accessories	SanDisk Ultra Dual 64 GB USB 3...	B01N6LU1VF	4.3	189104	253
3	Computers&Accessories	TP-Link Nano USB WiFi Dongle 150Mbps High Gain Wireless Network Wi-Fi Adapter for PC Desktop and Laptops, Supports Windows	B002SZEOLG	4.2	179692	253
4	Electronics	Amazon Basics High-Speed HD...	B014I8SX4Y	4.4	426973	235

페이지당 결과 수: 50   1 - 15 (전체 15행)

t5_category	product_name	product_id	rating_flo	rating_count	product_cnt
Computers&Accessories	SanDisk Cruzer Blade 32GB USB Flash Drive	B005FYNT3G	4.3	253105	253
Computers&Accessories	SanDisk Ultra Dual 64 GB USB 3.0 OTG Pen Drive (Black)	B01N6LU1VF	4.3	189104	253
Computers&Accessories	TP-Link Nano USB WiFi Dongle 150Mbps High Gain Wireless Network Wi-Fi Adapter for PC Desktop and Laptops, Supports Windows 10/8.1/8/7/XP, Linux, Mac OS X (TL-WN722N)	B002SZEOLG	4.2	179692	253
Electronics	Amazon Basics High-Speed HDMI Cable, 6 Feet - Supports Ethernet, 3D, 4K video,Black	B014I8SSD0	4.4	426973	235
Electronics	AmazonBasics Flexible Premium HDMI Cable (Black, 4K@60Hz, 18Gbps), 3-Foot	B07KSMBL2H	4.4	426973	235
Electronics	Amazon Basics High-Speed HDMI Cable, 6 Feet (2-Pack),Black	B014I8SX4Y	4.4	426973	235
Accessories&Peripherals	AmazonBasics USB 2.0 Cable - A-Male to B-Male - for Personal Computer, Printer- 6 Feet (1.8 Meters), Black	B00NH11KIK	4.5	107686	202
Accessories&Peripherals	AmazonBasics USB 2.0 Cable - A-Male to B-Male - for Personal Computer,	B00NH11KIK	4.5	107687	202

	Printer- 6 Feet (1.8 Meters), Black				
Accessories&Peripherals	boAt Deuce USB 300 2 in 1 Type-C & Micro USB Stress Resistant, Tangle-Free, Sturdy Cable with 3A Fast Charging & 480mbps Data Transmission, 10000+ Bends Lifespan and Extended 1.5m Length(Martian Red)	B08HDJ86NZ	4.2	94364	202
Home&Kitchen	Swiffer Instant Electric Water Heater Faucet Tap Home-Kitchen Instantaneous Water Heater Tank less for Tap, LED Electric Head Water Heaters Tail Gallon Comfort(3000W) ((Pack of 1))	B0BR4F878Q	4.8	53803	169
Home&Kitchen	Bajaj DX-7 1000W Dry Iron with Advance Soleplate and Anti-bacterial German Coating Technology, White	B008YW8M0G	4.2	46647	169
Home&Kitchen	Bajaj Rex 500W Mixer Grinder with Nutri-Pro Feature, 3 Jars, White	B00HVXS7WC	4.2	41349	169
Cables	Amazon Basics High-Speed HDMI Cable, 6 Feet (2-Pack),Black	B014I8SX4Y	4.4	426973	149
Cables	Amazon Basics High-Speed HDMI Cable, 6 Feet - Supports Ethernet, 3D, 4K video,Black	B014I8SSD0	4.4	426973	149
Cables	AmazonBasics Flexible Premium HDMI Cable (Black, 4K@60Hz, 18Gbps), 3-Foot	B07KSMBL2H	4.4	426973	149

#### • 추천시스템 4

##### 1. 구매 패턴 유사 사용자 리뷰기반 추천 시스템

2. 테마: 특정 제품에 관심 있는 사람들의 구매 패턴은 비슷할 것이다. 특정 제품에 리뷰를 남긴 사람들의 리뷰 작성 기록을 추적해 특정 제품 잠재 구매고객에게 그 제품 리뷰 작성자들이 리뷰를 남긴 다른 상품도 추천한다.

핵심질문: 특정 제품을 산 사람들은 어떤 제품을 살까?

주요자료: product\_id, user\_id

##### 3. 구현 로직

```
WITH uppair AS (
  SELECT product_id, product_name, user_id_split
  FROM `coral-mechanism-464902-i4.modulabs_project.amazon_cleaned`,
  UNNEST(SPLIT(user_id, ',')) AS user_id_split),
tu AS (
  SELECT DISTINCT user_id_split
  FROM uppair
  WHERE product_id = 'B01N6LU1VF'#3번 로직의 2번째 제품을 타깃 제품으로 설정
)
SELECT
```

```

uppair.product_name,
COUNT(*) AS co_purchase_count,
uppair.product_id
FROM uppair
JOIN tu
ON uppair.user_id_split = tu.user_id_split
WHERE uppair.product_id != 'B01N6LU1VF'#리뷰 중에서 타킷 제품 리뷰는 제외
GROUP BY uppair.product_name, uppair.product_id
ORDER BY co_purchase_count DESC

```

#### 4. 결과

상품코드 'B01N6LU1VF'인 샌디스크 듀얼 64기가 USB에 리뷰를 남긴 사람들이 리뷰를 남긴 제품은 전체 6개다. 아마존베이직 USB 급속충전 케이블이 2건, 필립스 스팀 다리미 1건, 젠하이저 무선 헤드폰 1건 등이다.

쿼리 결과

결과 저장 다음에서

작업 정보	결과	차트	JSON	실행 세부정보	실행 그래프
행	product_name	co_purchase_count	product_id		
1	Amazonbasics Micro Usb Fast Charging Cable For Android Smartphone,Personal Computer,Printer With Gold Plated Connectors (6 Feet, Black)	2	B07232M876		
2	Sennheiser CX 80S in-Ear Wired Headphones with in-line One-Button Smart Remote with Microphone Black	1	B083T5G5PM		

페이지당 결과 수: 50 1 - 6 (전체 6행) |<

Amazonbasics Micro Usb Fast Charging Cable For Android Smartphone,Personal Computer,Printer With Gold Plated Connectors (6 Feet, Black)	2	B07232M876
Philips GC1905 1440-Watt Steam Iron with Spray (Blue)	1	B008QTK47Q
Sennheiser CX 80S in-Ear Wired Headphones with in-line One-Button Smart Remote with Microphone Black	1	B083T5G5PM
AmazonBasics Micro USB Fast Charging Cable for Android Phones with Gold Plated Connectors (3 Feet, Black)	1	B0711PVX6Z
Bajaj DX-7 1000W Dry Iron with Advance Soleplate and Anti-bacterial German Coating Technology, White	1	B008YW8M0G
Western Digital WD 2TB My Passport Portable Hard Disk Drive, USB 3.0 with Automatic Backup, 256 Bit AES Hardware Encryption,Password Protection,Compatible with Windows and Mac, External HDD-Black	1	B07VTFN6HM

#### • 추천시스템5

##### 1. 가격대별 BEST 상품 추천

2. 테마: 고객들의 주머니 사정은 다르다. 할인가를 저가, 중저가, 중가, 중고가, 고가 다섯 구간으로 구분해 고객이 생각하는 예산대 별로 베스트 상품 3개를 추천한다. 베스트 상품은 평점과 평점 수를 이용 선정한다.

##### 3. 구현 로직

```

WITH priced AS (
SELECT
    product_id, product_name,discounted_price,
    rating_flo,rating_count,
    NTILE(5) OVER (ORDER BY discounted_price) AS price_tier
FROM `coral-mechanism-464902-i4.modulabs_project.amazon_cleaned`
WHERE rating_count > 0
),
priced_labeled AS (
SELECT

```

```

*,
CASE price_tier
  WHEN 1 THEN '저가'
  WHEN 2 THEN '중저가'
  WHEN 3 THEN '중가'
  WHEN 4 THEN '중고가'
  WHEN 5 THEN '고가'
END AS price_segment
FROM priced
)
SELECT price_segment, price_tier, product_id, product_name,
discounted_price, rating_flo, rating_count
FROM priced_labeled

QUALIFY
ROW_NUMBER() OVER (
  PARTITION BY price_tier
  ORDER BY rating_flo DESC, rating_count DESC
) <= 3

ORDER BY
  price_tier,
  rating_flo DESC,
  rating_count DESC;

```

#### 4. 결과

할인가를 저가, 중저가, 중가, 중고가, 고가 5개 구간으로 나누고, 5개 구간별로 평점, 평점 수를 기준으로 상위 3개 제품을 추출했다. 가격 구간 오름차순, 평점과 평점 수 내림차순을 우선순위로 가격구간대별 제품리스트를 정렬하였다.

쿼리 결과

작업 정보 [결과](#) [차트](#) [JSON](#) [실행 세부정보](#) [실행 그래프](#) [결과 저장](#) [새](#)

명	price_segment	price_tier	product_id	product_name	discounted_price	rating_flo	rating_count
1	저가	1	B00SH18114	Ikea 903.391.72 Polypropylene Plastic Solid Bevara Sealing Clip (Multicolour) - 30 Pack, Adjustable	160.0	4.6	2781
2	저가	1	B00NH11KIK	AmazonBasics USB 2.0 Cable - A-Male to B-Male - for Personal Computer, Printer- 6 Feet (1.8 Meters), Black	209.0	4.5	107687

페이지당 결과 수: 50 ▼ 1 ~ 15 (전체 15행)

price_segment	price_tier	product_id	product_name	discounted_price	rating_flo	rating_count
저가	1	B00SH18114	Ikea 903.391.72 Polypropylene Plastic Solid Bevara Sealing Clip (Multicolour) - 30 Pack, Adjustable	160	4.6	2781
저가	1	B00NH11KIK	AmazonBasics USB 2.0 Cable - A-Male to B-Male - for Personal Computer, Printer- 6 Feet (1.8 Meters), Black	209	4.5	107687



저가	1	B00NH11KIK	AmazonBasics USB 2.0 Cable - A-Male to B-Male - for Personal Computer, Printer- 6 Feet (1.8 Meters), Black	209	4.5	107686
중저가	2	B09ZHCJDP1	Amazon Basics Wireless Mouse   2.4 GHz Connection, 1600 DPI   Type - C Adapter   Upto 12 Months of Battery Life   Ambidextrous Design   Suitable for PC/Mac/Laptop	499	5	23
중저가	2	B0BP7XLX48	Syncwire LTG to USB Cable for Fast Charging Compatible with Phone 5/ 5C/ 5S/ 6/ 6S/ 7/8/ X/XR/XS Max/ 11/12/ 13 Series and Pad Air/Mini, Pod & Other Devices (1.1 Meter, White)	399	5	5
중저가	2	B0BQ3K23Y1	Oratech Coffee Frother electric, milk frother electric, coffee beater, cappuccino maker, Coffee Foamer, Mocktail Mixer, Coffee Foam Maker, coffee whisker electric, Froth Maker, coffee stirrers electric, coffee frothers, Coffee Blender, (6 Month Warranty) (Multicolour)	279	4.8	28
중가	3	B0B23LW7NV	Spigen EZ Fit Tempered Glass Screen Protector for iPhone 14 Pro Max - 2 Pack (Sensor Protection)	999	4.7	7779
중가	3	B0BM9H2NY9	Multifunctional 2 in 1 Electric Egg	699	4.7	2300

			Boiling Steamer Egg Frying Pan Egg Boiler Electric Automatic Off with Egg Boiler Machine Non- Stick Electric Egg Frying Pan- Tiger Woods (Multy)			
중가	3	B0BM4KTNL1	FIGMENT Handheld Milk Frother Rechargeable, 3-Speed Electric Frother for Coffee with 2 Whisks and Coffee Decoration Tool, Coffee Frother Mixer, CRESCENT ENTERPRISES VRW0.50BK (A1)	699	4.7	1729
중고가	4	B0BR4F878Q	Swiffer Instant Electric Water Heater Faucet Tap Home- Kitchen Instantaneous Water Heater Tank less for Tap, LED Electric Head Water Heaters Tail Gallon Comfort(3000W) ((Pack of 1))	1439	4.8	53803
중고가	4	B0BP89YBC1	Campfire Spring Chef Prolix Instant Portable Water Heater Geyser 1Ltr. for Use Home Stainless Steel Baking Rack   Restaurant   Office   Labs   Clinics   Saloon   with Installation Kit (With MCB)	1499	4.7	2591
중고가	4	B01MQ2A86A	Logitech M331 Silent Plus Wireless Mouse, 2.4GHz with USB Nano Receiver, 1000 DPI Optical Tracking, 3	1295	4.6	12375

			Buttons, 24 Month Life Battery, PC/Mac/Laptop - Black			
고가	5	B0B53DS4TF	Instant Pot Air Fryer, Vortex 2QT, Touch Control Panel, 360° EvenCrisp™ Technology, Uses 95 % less Oil, 4-in-1 Appliance: Air Fry, Roast, Bake, Reheat (Vortex 1.97Litre, Black)	4995	4.8	3964
고가	5	B09WN3SRC7	Sony Bravia 164 cm (65 inches) 4K Ultra HD Smart LED Google TV KD-65X74K (Black)	77990	4.7	5935
고가	5	B00K57MR22	Sujata Dynamix DX Mixer Grinder, 900W, 3 Jars (White)	6120	4.6	6550