

## Sample Data

Examples showing the queries being answered and their relations are listed at the bottom.

### Stock

Item ID	Warehouse ID	Count	Current Price	Historical Low	Historical High	Sale Status	Shipping Price
2345	823	2	\$120	\$110	\$140	Sale	\$20
2478	823	5	\$405	\$400	\$430	None	\$30
2598	823	85	\$125	\$100	\$250	Sale	\$22
2989	823	22	\$70	\$70	\$90	Sale	\$15
2999	823	0	\$120	\$110	\$150	Sale	\$50
3022	823	5	\$12	\$12	\$18	Clearance	\$0
4010	450	4	\$747	\$450	\$1199	None	\$300
4010	690	33	\$750	\$750	\$1199	None	\$20
5000	690	22	\$850	\$830	\$950	None	\$20
5000	111	2	\$1099	\$1099	\$1099	None	\$20
5001	040	4	\$170	\$169	\$161	Clearance	\$29223
5555	040	1	\$145	\$145	\$250	None	\$333
5556	040	4	\$100	\$100	\$100	None	\$0
5557	040	8	\$2839	\$2222	\$2839	None	\$22
5558	040	9	\$222	\$222	\$222	None	\$0

5559	040	2	\$939	\$900	\$1000	None	\$0
5560	040	2	\$200	\$200	\$1000	Sale	\$0
5561	040	0	\$20	\$10	\$220	None	\$0

#### Item

Item ID	Item Name	Category	Manufacturer	Series/Product Line	Release Date	TimeSince Release()	Model Number
2345	Samsung 860 QVO 1TB SSD	Storage	Samsung	860 QVO	12/7/2018	09/25/0001	MZ-76Q1T0B/AM
2478	Intel Core i7-10700K Desktop	CPU	Intel	400	5/20/2020	04/12/0000	BX8070110700K
2598	MSI Z390-A PRO LGA1151	Motherboard	MSI	Z390-A PRO	10/8/2018	11/24/0001	Z390-A PRO
2989	Corsair Vengeance LPX 16GB DDR4	Memory	Corsair	Vengeance LPX	7/13/2015	02/19/0007	CMK16GX4M2B3200C16
2999	Acer SB220Q Ultra-Thin	Monitor	Acer	Zero Frame Monitor	7/09/2018	02/23/0002	SB220Q bi
3022	Microsoft Wired Keyboard 600	Keyboard	Microsoft	null	12/3/2008	09/29/0011	ANB-00001
4010	Samsung Galaxy S10	Phone	Samsung	S	2/21/2019	07/11/0001	SM-G973UZWAXAA
5000	Apple iPhone 11 Pro Max	Phone	Apple	Pro	10/29/2019	11/03/0000	B07ZQSQSBM

5001	Intel Core i5-9600K	CPU	Intel	300	3/20/2019	06/12/0001	B07PZQL75X
5555	Corsair Vengeance RGB Pro 32GB	RAM	Corsair	Vengeance RGB	8/24/2018	01/08/0002	CMW32GX4M2C3200C16
5556	HP Pavilion 22cwa 21.5-Inch Full HD Monitor	Monitor	HP	Pavilion	8/24/2018	01/08/0002	22cwa
5557	HP Pavilion 22cwb 21.5-Inch 720p Monitor	Monitor	HP	Pavilion	7/13/2015	02/19/0007	22cwb
5558	HP Pavilion 22cwc 21.5-Inch 4k Monitor	Monitor	HP	Pavilion	7/09/2018	02/23/0002	22cwc
5559	HP Pavilion 22cwd 23-Inch Full HD Monitor	Monitor	HP	Pavilion	12/3/2008	09/29/0011	22cwd
5560	HP Pavilion 22cwe 21.5-Inch 1440p Monitor	Monitor	HP	Pavilion	2/21/2019	07/11/0001	22cwe
5561	HP Pavilion 22cwf 21.5-Inch 144p Monitor	Monitor	HP	Pavilion	2/21/2019	07/11/0001	22cwf

### CPU

Item ID	Chipset	Integrated Graphics	Wattage
2478	Intel 400	1	125
5001	Intel 300	1	120

### Memory

Item ID	Memory Capacity
2989	16
5555	32

### Storage

Item ID	Storage Capacity	Storage Type	Storage Standard	Form Factor	Wattage
2345	1000	SSD	SATA	2.5 Inches	2.5

### Motherboard

Item ID	Chipset	num_usbports	wifi+bluetooth	Form Factor
2598	Intel 300	4	0	ATX

### Website/Vendor

URL	Company
amazon.com/Samsung-Inch-Internal-MZ-76Q1T0B-AM/dp/B07L3D19MY/	Amazon
amazon.com/Intel-i7-10700K-Processor-Unlocked-BX8070110700K/dp/B086ML4XSB	Amazon
amazon.com/MSI-PRO-LGA1151-Gigabit-Motherboard/dp/B07J6Z9KJ2	Amazon
amazon.com/Corsair-Vengeance-3200MHz-Desktop-Memory/dp/B0143UM4TC	Amazon

amazon.com/gp/product/B07CVL2D2S/	Amazon
amazon.com/Microsoft-Wired-Keyboards-600-Black/dp/B001OAR26K	Amazon
amazon.com/Samsung-Galaxy-Factory-Unlocked-Warranty/dp/B07N4GKMHB	Amazon
samsung.com/us/mobile/galaxy-s10/buy/?link=galaxy-s10	Samsung
amazon.com/Apple-iPhone-64GB-Space-Gray/dp/B07ZQSQSBM/	Amazon
apple.com/shop/buy-iphone/iphone-11-pro/6.5-inch-display-64gb-space-gray-unlocked	Apple
amazon.com/Intel-i5-9600K-Processor-Unlocked-Motherboard/dp/B07PZQL75X	Amazon
amazon.com/Corsair-CMW32GX4M2C3200C16-Vengeance-PC4-25600-Desktop/dp/B07GTG2T7L	Amazon
amazon.com/HP-Pavilion-21-5-Inch-Monitor-22cwa/dp/B015WCV70W	Amazon

### Warehouse

Warehouse ID	URL	Location
823	amazon.com/Samsung-Inch-Internal-MZ-76Q1T0B-AM/dp/B07L3D19MY/ amazon.com/Intel-i7-10700K-Processor-Unlocked-BX8070110700K/dp/B086ML4XSB amazon.com/MSI-PRO-LGA1151-Gigabit-	12345

	Motherboard/dp/B07J6Z9KJ2 amazon.com/Corsair-Vengeance-3200M Hz-Desktop-Memory/dp/B0143UM4TC amazon.com/gp/product/B07CVL2D2S/ amazon.com/Microsoft-Wired-Keyboard-6 00-Black/dp/B001OAR26K amazon.com/Samsung-Galaxy-Factory-U nlocked-Warranty/dp/B07N4GKMHB	
690	samsung.com/us/mobile/galaxy-s10/buy/? link=galaxy-s10	23456
111	apple.com/shop/buy-iphone/iphone-11-pr o/6.5-inch-display-64gb-space-gray-unloc ked	34567
040	amazon.com/Intel-i5-9600K-Processor-Un locked-Motherboard/dp/B07PZQL75X amazon.com/Corsair-CMW32GX4M2C32 00C16-Vengeance-PC4-25600-Desktop/d p/B07GTG2T7L amazon.com/Apple-iPhone-64GB-Space- Gray/dp/B07ZQSQSBM/	45678

### Monitor

Item ID	Screen Size	Resolution	Refresh Rate	Type	Audio	HDMI	DisplayPort	DVI	Color
2999	21.5	1080	75	IPS	0	1	0	3	Black
5556	21.5	1080	60	IPS	0	1	0	0	Black
5557	21	720	60	IPS	0	1	0	0	Black

5558	21	4k	60	IPS	0	1	0	0	Black
5559	23	1080	60	IPS	0	1	0	0	Black
5560	21	1440	60	IPS	0	1	0	0	Black
5561	2	144	60	IPS	0	1	0	0	Black

### Keyboard

Item ID	Color	Backlight Color	Numpad	Wireless/Wired
3022	Black	null	1	0

### Phone

Item ID	Resolution	Type	IP Rating	Storage	RAM	CPU	OS	Carrier	LTE/5G	Battery Size	Phone Size
4010	3040x1440	OLED	68	128	8	Snapdragon 855	Android 9	Unlocked	1	3100	5.8
5000	2688 x 1242	OLED	68	64	4	Apple A13 Bionic	IOS 13	Unlocked	1	3969	6.5

These are the queries that our database will be expected to answer. They have been answered below using sample data. **The red is the alteration to the query to make it specific (ex. instead of CPU we list the actual CPU)**

1. What is the current price for an Acer **SB220Q Ultra-Thin**?
  - a. \$120
2. What is the lowest price for a **Samsung Galaxy S10** across all vendor websites?
  - a. A Samsung Galaxy S10 from Amazon costs \$747, whereas the best price from Samsung costs \$750. Therefore, \$747 is the current lowest price.
3. Which vendor has the lowest price for a **Samsung Galaxy S10** currently?
  - a. A Samsung Galaxy S10 from Amazon costs \$747, whereas the best price from Samsung costs \$750. Therefore, Amazon is selling it for the lowest price currently.
4. What is the highest price historically for an **Intel Core i7-10700K Desktop**, on **Amazon**?
  - a. \$430
5. List all item IDs of **phones that are currently priced above \$800 dollars** and have less than **30 stock** in warehouse **690**.
  - a. 5000 (Apple iPhone 11 Pro Max).
6. Does **Amazon** have a **Microsoft Wired Keyboard 600** in stock?
  - a. Yes
7. List all items available in the **Pro Series** from **Apple**.
  - a. The Iphone 11 Pro Max, etc.
8. What items are currently sold by **Microsoft**?
  - a. A Microsoft Wired Keyboard 600
9. List all items under a **\$1000** under **the phone** category, across all vendor sites.
  - a. The Samsung Galaxy S10 costs \$747 at Amazon and \$750 on Samsung.com. The IPhone 11 Pro Max costs \$850 at Amazon.
10. What motherboards are compatible with this **Intel Core i5-9600K**? (matching chipset)
  - a. The MSI Z390-A PRO LGA1151 is compatible with that CPU.
11. List all the memory + corresponding prices on **Amazon** that are at least 8GB.
  - a. The Corsair Vengeance RGB Pro 32GB and the Corsair Vengeance LPX 16GB.



12. What is the location of the warehouse where the **Microsoft Wired Keyboard 600 from Amazon** is located?
- a. 12345
13. What sites have free shipping available for this **Microsoft Wired Keyboard 600**?
- a. Amazon
14. Which **SSDs on Amazon** are currently on sale?
- a. Samsung 860 QVO 1TB SSD
15. What devices are compatible with **T-mobile**?
- a. The Samsung S10s from Amazon and Samsung.com, and the iPhone 11 Pro Max from Amazon and Apple.com.
16. What devices run on **Android 9**?
- a. Samsung Galaxy S10
17. List all products **by Samsung that are currently** on sale whos price has never exceeded **\$150** and has never been below **\$100**.
- a. The Samsung 860 QVO 1TB SSD is currently on sale and has only been within that price range.
18. What phones were released so far this year?
- a. None in 2020
19. What is the **outdated hard-drive that is still in stock in warehouse 823**?
- a. Samsung 860 QVO 1TB SSD
20. What are the 5 most expensive monitors from **HP**?
- a. HP Pavilion 22cwa 21.5-Inch Full HD Monitor
  - b. HP Pavilion 22cwb 21.5-Inch 4k Monitor
  - c. HP Pavilion 22cwc 21.5-Inch 720p Monitor
  - d. HP Pavilion 22cwd 23-Inch Full HD Monitor
  - e. HP Pavilion 22cwe 21.5-Inch 1440p Monitor