

```
71      -- 1. Name of sellers and products that have availability = 0
72      -- goes to table sell, joins with merhchants, joins with products and the
73
74 •  SELECT m.name, p.name
75   FROM sell
76   INNER JOIN merchants m
77   USING(mid)
78   INNER JOIN products p
79   USING(pid)
80   WHERE quantity_available = 0;
81
```

100% 30:80 | 1 error found

Result Grid Filter Rows: Search Export:

name	name
Acer	Router
Acer	Network Card
Apple	Printer
Apple	Router
HP	Router
HP	Super Drive
HP	Laptop
Dell	Router
Lenovo	Ethernet Ada...

Result 45

MySQL Workbench

Local instance 3306 - Warning - not supported

Administration Schemas HW2* project_med_records* SQL File 4* HW3* SQL File 6

SCHEMAS

Filter objects

	name	description	quantity_available
	Hard Drive	640GB USB 2.0 Portable	6
	Network Card	Wireless a/b/g/n	1
	Super Drive	External CD/DVD R/RW USB	6
	Network Card	Livewire Powerline AV Kit	6
	Monitor	27-inch LED	2
	Printer	Black & White Laser Multifunction Printer	14
	Ethernet Ada...	High Performance Wireless-N Adapter	14
	Desktop	Intel Core i7-2630QM 2.00GHz / 8GB RAM / 2T...	1
	Router	Wireless Dual Band Gigabit Router	1
	Monitor	LED 22-inch Backlit	12
	Router	Wireless N HD Media Router 1000 DIR-657	5
	Super Drive	12x Internal Blu-ray Disc/DVD/CD Writer	6
	Super Drive	DVD/CD/RW IDE	2
	Router	54 Mbps 4-port Wireless 802.11g DSL Router	2
	Laptop	1.66GHz Processor / 2GB RAM / 250GB Hard...	7
	Laptop	Core i7 /17.3 / 750/8GB PC HP 8760w Core i7...	6
	Printer	Color Laser	9
	Network Card	MegaPlug AV 200 Mbs	7
	Hard Drive	500GB Red-Hot Skin Portable	2
	Printer	All-in-one	11
	Super Drive	USB 2.0 Slot-Loading Portable DVD Super Multi...	14
	Hard Drive	2TB Internal SATA	1
	Laptop	Intel Core i5-2410M 2.3GHz / 4GB RAM / 640G...	14
	Super Drive	DVD+R 8X DVD+RW 22X DVD-R 16X DVD-RO...	6
	Router	Gigabit Router with USB for Windows and Linux	5
	Hard Drive	640GB USB 2.0 Portable	5
	Network Card	Wireless a/b/g/n	11
	Super Drive	External CD/DVD R/RW USB	3
	Network Card	100Mbps Full/Low Profile Ethernet Multi Mode...	7
	Network Card	Livewire Powerline AV Kit	11
	Monitor	27-inch LED	7
	Printer	Black & White Laser Multifunction Printer	5
	Ethernet Ada...	High Performance Wireless-N Adapter	9
	Desktop	Intel Core i7-2630QM 2.00GHz / 8GB RAM / 2T...	5
	Router	Wireless-G Broadband Router with VPN	4
	Router	Wireless Dual Band Gigabit Router	5

Result 46

! Read Only

Query Completed

```
91 -- select a distinct count of customers, from customers table, join place
92 • SELECT DISTINCT COUNT(c.cid)
93 FROM customers c
94 INNER JOIN place p ON p.cid = c.cid
95 INNER JOIN contain co ON co.oid = p.oid
96 WHERE co.pid IN (4,5)
97 -- to ensure there are no customers of routers, select distinct count of
98 -- join place on cid, join contain on oid, products on pid, then check if
99 ✘ EXCEPT
100 SELECT DISTINCT COUNT(c.cid)
101 FROM customers c
102 INNER JOIN place p ON p.cid = c.cid
103 INNER JOIN contain co ON co.oid = p.oid
104 INNER JOIN products pr ON pr.pid = co.pid
105 WHERE pr.name = 'Router';
106
```

100% 26:105 | 1 error found

Result Grid Filter Rows: Search Export:

COUNT(c.cid)

96

Result 47

Action Output ▼

	Time	A	Response
✓ 170	22:32:47	S	123 row(s) returned
✓ 171	22:45:23	S	1 row(s) returned

MySQL Workbench

Local instance 3306 - Warning - not supported

Administration Schemas HW2* project_med_records* SQL File 4* HW3* SQL File 6

SCHEMAS

Filter objects

Result Grid Filter Rows: Search Export:

	mid	pid	price	quantity_available
	3	10	738.9952000000001	2
	3	12	220.8064	3
	3	13	167.808	15
	3	14	526.2912	13
	3	15	229.1264000000002	13
	3	16	806.688	2
	3	17	953.8367999999998	3
	3	18	131.5584	0
	3	19	943.9168	11
	3	20	353.2928	9
	3	21	421.4528	0
	3	23	64.608	9
	3	24	774.1375999999999	12
	3	25	374.5728000000003	3
	3	26	547.9808	4
	3	28	754.5663999999999	6
	3	29	601.312	4
	3	3	901.632	10
	3	30	179.7824	3
	3	4	219.6352	9
	3	5	107.6031999999999	4
	3	6	77.0816000000001	0
	3	8	662.0544	3
	3	9	634.5024	10

sell 50

Read Only

Action Output

	Time	Response	Duration / Fetch Time
174	23:03:38	U 24 row(s) affected Rows matched: 24 Changed: 24 Warnings: 0	0.042 sec
175	23:03:38	S 24 row(s) returned	0.0020 sec / 0.00023...

Query Completed

MySQL Workbench

Local instance 3306 - Warning - not supported

Administration Schemas HW2* project_med_records* SQL File 4* HW3* SQL File 6

SCHEMAS

Filter objects

	product_name	min_price	max_price	average_price
	Desktop	311.06	1192.2959999999998	877.1532
	Ethernet Adapter	126.82	1008.36	595.36
	Hard Drive	134.504	773.55	448.5827999999996
	Hard Drive	751.64	1151.28	953.5975
	Hard Drive	836.99	1328.19	1009.7775000000001
	Laptop	33.5	1370.48	736.1652000000001
	Laptop	96.352	1171.18	473.6380000000001
	Laptop	425.1	967.671999999999	638.5006666666667
	Monitor	252.01	1435.38	727.7228000000001
	Monitor	375.59	1103.47	731.8900000000001
	Monitor	793.127...	1046.2	944.3193333333334
	Network Card	91.65	925.57	552.6075
	Network Card	108.3	1381.76	566.268
	Network Card	130.43	943.208	700.6220000000001
	Network Card	276.008	1291.8	936.8845
	Network Card	361.22	923.744	759.9188000000001
	Printer	286.408	1347.2	834.8936
	Printer	310.83	1294.84	918.75
	Printer	397.92	1345.37	716.9032000000001
	Router	80.76	796.89	392.6525
	Router	164.448	1256.57	800.4376
	Router	351.24	945.51	614.3692000000001
	Router	521.07	1061.15	854.3676
	Router	554.02	1328.35	1010.3632000000001
	Super Drive	61.84	1124.26	514.3075
	Super Drive	224.728	1487.03	729.4645
	Super Drive	274.544	1033.91	604.4735000000001
	Super Drive	356.13	1406.52	882.936499999999
	Super Drive	373.31	1450.74	967.3100000000002

Result 48 Read Only

Action Output

	Time	Response	Duration / Fetch Time
171	22:45:23	S 1 row(s) returned	0.042 sec / 0.00020...
172	22:53:14	S 30 row(s) returned	0.012 sec / 0.000018...

Query Completed

```
131
132 -- 6. Annual total sales for each company (sort the results along the com
133 • SELECT m.name AS company_name, -- display the company name, the year fro
134     EXTRACT(YEAR FROM p.order_date) AS year,
135     SUM(s.price) AS sales
136 FROM merchants m -- from the merchants table join sell, contain, orders,
137 INNER JOIN sell s ON s.mid = m.mid
138 INNER JOIN contain co ON co.pid = s.pid
139 INNER JOIN orders o ON o.oid = co.oid
140 INNER JOIN place p ON p.oid = o.oid
141 WHERE order_date BETWEEN '2020-01-01' AND '2020-12-31' -- look between the
142 GROUP BY m.mid, m.name, EXTRACT(YEAR FROM p.order_date)
143 ORDER BY m.name, year;
144
145 -- 7. Which company had the highest annual revenue and in what year
```

100%

1:144 | 1 error found

Result Grid Filter Rows: Search Export:

company_name	year	sales
Acer	2020	182311.14...
Apple	2020	216461.06...
Dell	2020	208063.07...
HP	2020	144620.14...
Lenovo	2020	214154.25...

Result 49

ction Output

	Time	A	Response
✓ 172	22:53:14	S	30 row(s) returned
✓ 173	23:01:50	S	5 row(s) returned

```
144  
145 -- 7. Which company had the highest annual revenue and in what year  
146 • SELECT m.name AS company_name, -- display the company name, their revenue  
147     SUM(s.price) AS revenue,  
148     EXTRACT(YEAR FROM p.order_date) AS year  
149 FROM merchants m -- from merchants table join sell, contain, orders, place  
150 INNER JOIN sell s ON s.mid = m.mid  
151 INNER JOIN contain co ON co.pid = s.pid  
152 INNER JOIN orders o ON o.oid = co.oid  
153 INNER JOIN place p ON p.oid = o.oid  
154 GROUP BY m.mid, m.name, EXTRACT(YEAR FROM p.order_date)  
155 ORDER BY SUM(s.price) DESC -- order by the sum of prices descending so the  
156 LIMIT 1; -- limit 1 so the highest year is the only displayed
```

157

158

159 -- 8. On average, what was the cheapest shipping method ever used?

100% 10:156 | 1 error found

Result Grid Filter Rows: Search Export: Fetch rows:

company_name	revenue	year
Lenovo	324291.59000000067	2018

Result 51

Action Output

	Time	A	Response
175	23:03:38	S	24 row(s) returned
176	23:09:17	S	1 row(s) returned

```
155 ORDER BY SUM(s.price) DESC -- order by the sum of prices descending so the
156 LIMIT 1; -- limit 1 so the highest year is the only displayed
157
158
159 -- 8. On average, what was the cheapest shipping method ever used?
160 • SELECT shipping_method, AVG(shipping_cost) AS average_cost -- display the
161 FROM orders
162 GROUP BY shipping_method -- organize by the shipping method
163 ORDER BY AVG(shipping_cost) ASC -- order the average cost ascending so the
164 LIMIT 1; -- limit 1 so the only method displayed is the cheapest on average
165
166 -- 9. What is the best sold ($) category for each company?
167 • ⓟ WITH category_sales AS (
168     SELECT m.mid,
169         m.name AS company_name,
170         p.category,
```

100% 9:164 | 1 error found

Result Grid Filter Rows: Search Export: Fetch rows:

shipping_method	average_cost
USPS	7.455760869565214

Result 52

Action Output

	Time	A	Response
✓ 176	23:09:17	S	1 row(s) returned
✓ 177	23:13:07	S	1 row(s) returned

```
163 ORDER BY AVG(shipping_cost) ASC -- order the average cost ascending so the
164 LIMIT 1; -- limit 1 so the only method displayed is the cheapest on average
165
166 -- 9. What is the best sold ($) category for each company?
167 • ⊖ WITH category_sales AS ( -- create category sales variable
168     SELECT m.mid, -- variable will give access to the company name,
169             -- total sales, and the ranking of the prices
170             m.name AS company_name,
171             p.category,
172             SUM(s.price) AS total_sales,
173             RANK() OVER (PARTITION BY m.mid ORDER BY SUM(s.price) DESC) AS rank
174     FROM merchants m
175     INNER JOIN sell s ON s.mid = m.mid
176     INNER JOIN products p ON p.pid = s.pid
177     INNER JOIN contain co ON co.pid = p.pid
```

100% 23:184 | 1 error found

Result Grid Filter Rows: Search Export:

company_name	category	total_sales
Acer	Peripheral	751705.6600000008
Apple	Peripheral	725401.4400000034
Dell	Peripheral	690326.4899999981
HP	Networking	285953.8368000006
Lenovo	Peripheral	702791.940000001

Result 53

Action Output

	Time	A	Response
✓ 177	23:13:07	S	1 row(s) returned
✓ 178	23:17:04	W	5 row(s) returned

```

186    -- 10. For each company find out which customers have spent the most and
187
188    -- create variable of the customer spending for each company
189 • ⊖ WITH customer_spending AS( -- create customer spending variable
190        SELECT m.mid, -- display the company, customer name and total spent,
191                m.name AS company,
192                c.fullname AS customer_name,
193                SUM(s.price) AS total_spent,
194                RANK() OVER(PARTITION BY m.mid ORDER BY SUM(s.price) DESC) AS
195                RANK() OVER(PARTITION BY m.mid ORDER BY SUM(s.price) ASC) AS
196        FROM merchants m
197        Inner JOIN sell s ON s.mid = m.mid
198        INNER JOIN contain co ON co.pid = s.pid
199        INNER JOIN place p ON p.oid = co.oid
200        INNER JOIN customers c ON c.cid = p.cid

```

20:222 | 1 error found

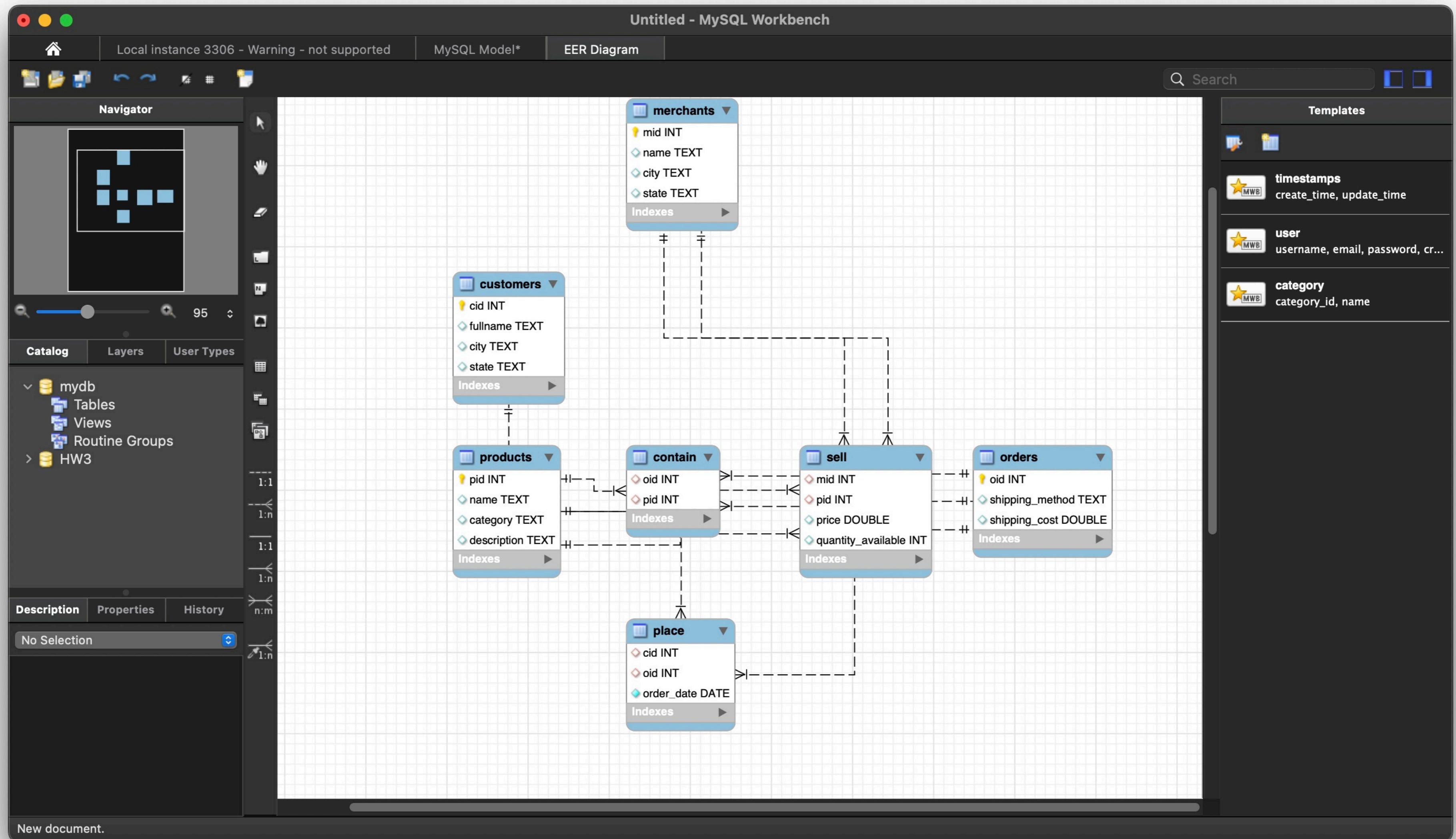
Result Grid Filter Rows: Search Export:

company	highest_spender	highest_spent	lowest_spender	lowest_spent
Acer	Dean Heath	75230.28999999998	Inez Long	31901.019999999982
Apple	Clementine Travis	84551.10999999997	Inez Long	32251.09999999998
Dell	Clementine Travis	85611.54999999999	Inez Long	31135.74000000001
HP	Clementine Travis	42641.958399999996	Inez Long	16680.2496
Lenovo	Haviva Stewart	83030.25999999997	Inez Long	33948.91

Result 54

Action Output

	Time	Response
✓ 178	23:17:04	5 row(s) returned
✓ 179	23:22:20	5 row(s) returned



New document.