

Bamazon User's Guide

Database preparation

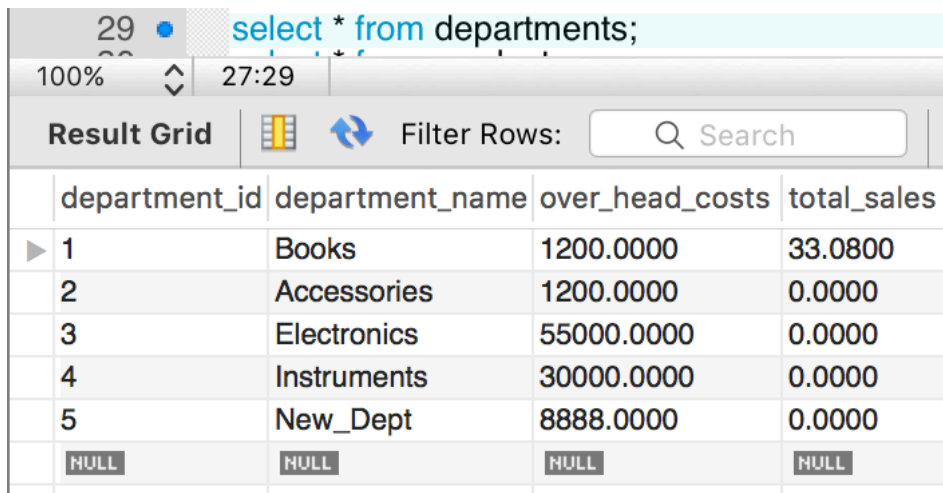
```
CREATE database Bamazon;
```

```
USE Bamazon;
```

```
CREATE TABLE products (  
  item_id INT NOT NULL auto_increment,  
  product_name VARCHAR(128) NULL,  
  department_name VARCHAR(64) NULL,  
  price DECIMAL(10,4) NULL,  
  stock_quantity DECIMAL(10,4) NULL,  
  
  PRIMARY KEY (item_id)  
);
```

```
CREATE TABLE departments (  
  department_id INT NOT NULL auto_increment,  
  department_name VARCHAR(64) NULL,  
  over_head_costs DECIMAL(10,4) NULL,  
  total_sales DECIMAL(10,4) NULL,  
  
  PRIMARY KEY (department_id)  
);
```

```
ALTER TABLE `Bamazon`.`products`  
ADD COLUMN `product_sales` DECIMAL(10,4) 0 AFTER `product_sales`;
```



The screenshot shows a database client interface. At the top, a query editor displays the command `select * from departments;`. Below the editor, a toolbar includes a 'Result Grid' button, a refresh icon, and a 'Filter Rows' section with a search input. The main area displays a table with the following data:

	department_id	department_name	over_head_costs	total_sales
▶	1	Books	1200.0000	33.0800
	2	Accessories	1200.0000	0.0000
	3	Electronics	55000.0000	0.0000
	4	Instruments	30000.0000	0.0000
	5	New_Dept	8888.0000	0.0000
	NULL	NULL	NULL	NULL

32 • select * from products;

100% 11:27

Result Grid Filter Rows: Search Edit: Export

item_id	product_name	department_name	price	stock_quant...	product_sales
1	Harry Porter	Books	12.5000	122.0000	12.5000
2	The Davinci Code	Books	10.2900	10001.0000	20.5800
3	MacBook Pro 2015	Electronics	1099.0000	100.0000	0.0000
4	Seiko Watch	Accessories	59.9900	1000.0000	0.0000
5	Gibson Acoustic Guitar	Instruments	2500.0000	1000.0000	0.0000
6	Java script	Books	3.9900	100.0000	0.0000
NULL	NULL	NULL	NULL	NULL	NULL

Challenge #1

- Database status

item_id	product_name	department_name	price	stock_quantity	product_sales
1	Harry Porter	Books	12.5000	122.0000	12.5000
2	The Davinci Code	Books	10.2900	10001.0000	20.5800
3	MacBook Pro 2015	Electronics	1099.0000	100.0000	0.0000
4	Seiko Watch	Accessories	59.9900	1000.0000	0.0000
5	Gibson Acoustic Guitar	Instruments	2500.0000	998.0000	5000.0000
6	Java script	Books	3.9900	100.0000	0.0000

- User buy 1 Java script book.

```
Trongs-MacBook-Pro:Amazon dotrong$ node amazonCustomer.js
Available item in our Store
-----
Product_ID | Product_Name | Price
1          | Harry Porter | 12.5
2          | The Davinci Code | 10.29
3          | MacBook Pro 2015 | 1099
4          | Seiko Watch | 59.99
5          | Gibson Acoustic Guitar | 2500
6          | Java script | 3.99

? ? What is the id of product you want to buy? 6
? ? How many units of product you want to buy? 1
1 items are sold!
Trongs-MacBook-Pro:Amazon dotrong$
```

Stock quantity of Java script book reduced to 99, product sales is now \$3.99

item_id	product_name	department_name	price	stock_quantity	product_sales
1	Harry Porter	Books	12.5000	122.0000	12.5000
2	The Davinci Code	Books	10.2900	10001.0000	20.5800
3	MacBook Pro 2015	Electronics	1099.0000	100.0000	0.0000
4	Seiko Watch	Accessories	59.9900	1000.0000	0.0000
5	Gibson Acoustic Guitar	Instruments	2500.0000	998.0000	5000.0000
6	Java script	Books	3.9900	99.0000	3.9900

User wants to buy 100000 “The DaVinci code” book.

```
Trongs-MacBook-Pro:Amazon dotrong$ node amazonCustomer.js
Available item in our Store
```

```
-----
Product_ID | Product_Name | Price
1 | Harry Porter | 12.5
2 | The Davinci Code | 10.29
3 | MacBook Pro 2015 | 1099
4 | Seiko Watch | 59.99
5 | Gibson Acoustic Guitar | 2500
6 | Java script | 3.99
```

```
? ? What is the id of product you want to buy? 6
```

```
? ? How many units of product you want to buy? 1
```

```
1 items are sold!
```

```
Trongs-MacBook-Pro:Amazon dotrong$ node amazonCustomer.js
Available item in our Store
```

```
-----
Product_ID | Product_Name | Price
1 | Harry Porter | 12.5
2 | The Davinci Code | 10.29
3 | MacBook Pro 2015 | 1099
4 | Seiko Watch | 59.99
5 | Gibson Acoustic Guitar | 2500
6 | Java script | 3.99
```

```
? ? What is the id of product you want to buy? 2
```

```
? ? How many units of product you want to buy? 100000
```

```
Sorry we only have 10001. Please comeback later
```

```
Trongs-MacBook-Pro:Amazon dotrong$
```

Challenge 2

- View Products

```
Trongs-MacBook-Pro:Bamazon dotrong$ node bamazonManager.js
? Please select following options View Products for Sale

Item in our Store
-----
Product_ID | Product_Name | Price | Stock_Quantity
1 | Harry Potter | 12.5 | 122
2 | The Davinci Code | 10.29 | 10001
3 | MacBook Pro 2015 | 1099 | 100
4 | Seiko Watch | 59.99 | 1000
5 | Gibson Acoustic Guitar | 2500 | 998
6 | Java script | 3.99 | 99

? Please select following options (Use arrow keys)
> View Products for Sale
View Low Inventory
Add to Inventory
Add New Product
Exit application
```

- View Low Inventory

```
? Please select following options View Low Inventory

Item in our Store
-----
Product_ID | Product_Name | Price | Stock_Quantity
? Please select following options (Use arrow keys)
> View Products for Sale
View Low Inventory
Add to Inventory
Add New Product
Exit application
```

- Add To Inventory: add 1 items "Gibson Acoustic Guitar"

Current Stock Quantity in database

```
? Please select following options View Products for Sale

Item in our Store
-----
Product_ID | Product_Name | Price | Stock_Quantity
1 | Harry Porter | 12.5 | 12278
2 | The Davinci Code | 10.29 | 10001
3 | MacBook Pro 2015 | 1099 | 100
4 | Seiko Watch | 59.99 | 1000
5 | Gibson Acoustic Guitar | 2500 | 9982
6 | Java script | 3.99 | 99

? Please select following options Exit application
Trongs-MacBook-Pro:Bamazon dotrong$ node bamazonManager.js
? Please select following options Add to Inventory
? ? Which product id you would like to add more items ? 5
? ?How many items you would like to add ? 1
1 added successfully to inventory
```

After 1 items id #5 “Gibson Guitar” added, stock increased from 9982 to 9983

```
? Please select following options View Products for Sale

Item in our Store
-----
Product_ID | Product_Name | Price | Stock_Quantity
1 | Harry Porter | 12.5 | 12278
2 | The Davinci Code | 10.29 | 10001
3 | MacBook Pro 2015 | 1099 | 100
4 | Seiko Watch | 59.99 | 1000
5 | Gibson Acoustic Guitar | 2500 | 9983
6 | Java script | 3.99 | 99
```

- Add new Product: add Samsung TV

```
? Please select following options Add New Product
? ? The name of product you would like to add ? Samsung TV
? ? The name of department of this product ? Electronics
? ? Product price ? 550
? ? How many items you would like to add for this new product ? 1000
Item added successfully to inventory
```

```
? Please select following options View Products for Sale
```

```
Item in our Store
```

Product_ID	Product_Name	Price	Stock_Quantity
1	Harry Potter 12.5	12278	
2	The Davinci Code 10.29	10001	
3	MacBook Pro 2015 1099	100	
4	Seiko Watch 59.99	1000	
5	Gibson Acoustic Guitar 2500	9983	
6	Java script 3.99	99	
7	Samsung TV 550	1000	

```
? Please select following options (Use arrow keys)
```

```
> View Products for Sale
```

```
View Low Inventory
```

```
Add to Inventory
```

```
Add New Product
```

```
Exit application
```

Challenge 3

- View Product Sales by Department

```
Trongs-MacBook-Pro:Bamazon dotrong$ node bamazonSupervisor.js
```

```
? Please select following options Product Sales by Department
```

```
Sales by Department in our Store
```

Department_ID	Department_Name	Over_Head_Costs	Total_Sales	Total_Profit
1	Books 1200	37.07	-1162.93	
2	Accessories 1200	0	-1200	
3	Electronics 55000	0	-55000	
4	Instruments 30000	7500	-22500	
5	New_Dept 8888	0	-8888	

```
? Please select following options (Use arrow keys)
```

```
> Product Sales by Department
```

```
Create New Department
```

```
Exit application
```

User buys 3 Samsung TV: total sales will be $3 \times 550 = 1,650$. Total Sales in Department table for Electronics increased from 0 to 1,650, and total profit increased from -55,000 to -53,350

```
Bamazon — -bash — 93x20
-----
Product_ID | Product_Name | Price
1 | Harry Potter | 12.5
2 | The Davinci Code | 10.29
3 | MacBook Pro 2015 | 1099
4 | Seiko Watch | 59.99
5 | Gibson Acoustic Guitar | 2500
6 | Java script | 3.99
7 | Samsung TV | 550
[? ? What is the id of product you want to buy? 7
[? ? How many units of product you want to buy? 3
3 items are sold!
dhcp-v111-122:Bamazon dotrong$

Trongs-MacBook-Pro:Bamazon dotrong$ node bamazonSupervisor.js
? Please select following options Product Sales by Department

Sales by Department in our Store

-----
Department_ID | Department_Name | Over_Head_Costs | Total_Sales | Total_Profit
1 | Books | 1200 | 37.07 | -1162.93
2 | Accessories | 1200 | 0 | -1200
3 | Electronics | 55000 | 1650 | -53350
4 | Instruments | 30000 | 7500 | -22500
5 | New_Dept | 8888 | 0 | -8888

? Please select following options (Use arrow keys)
> Product Sales by Department
Create New Department
Exit application
```

- Create new department: add Clothing Department

```
2      | Accessories | 1200   | 0      | -1200
Trongs-MacBook-Pro:Bamazon dotrong$ node bamazonSupervisor.js
? Please select following options Create New Department
? ? The name of department you would like to add ? Clothing
? ? Over head costs of this department ? 100000
Department added successfully to inventory

? Please select following options Product Sales by Department

Sales by Department in our Store

-----
Department_ID | Department_Name | Over_Head_Costs | Total_Sales | Total_Profit
1             | Books          | 1200            | 37.07       | -1162.93
2             | Accessories    | 1200            | 0           | -1200
3             | Electronics    | 55000           | 3848        | -51152
4             | Instruments    | 30000           | 7500        | -22500
5             | New_Dept      | 8888            | 0           | -8888
6             | Clothing       | 100000          | 0           | -100000

? Please select following options (Use arrow keys)
> Product Sales by Department
Create New Department
Exit application
```