

```

2 • select distinct
3   s.subregion_name as "subregion",
4   d.day as "day",
5   d.num_day as "num_day",
6   p.isbn as "ISBN",
7   p.title as "title",
8   sum(t.sell_by_product) as "total_sales"
9 from
10  olap_bookshop.subregion s,
11  olap_bookshop.day d,
12  olap_bookshop.books p,
13  olap_bookshop.facts_ticket t,
14  olap_bookshop.warehouse
15 where
16  t.warehouse_code = warehouse.code and
17  warehouse.subregion_id = s.subregion_id and
18  t.day_id = d.day_id and
19  t.books_isbn = p.isbn
20 group by
21  s.subregion_name,
22  d.day,
23  d.num_day,
24  p.isbn
25 order by num_day asc;
26

```

Result Grid |   Filter Rows: | Export:  | Wrap Cell Content: 

	subregion	day	num_day	ISBN	title	total_sales
▶	east africa	wednesday	1	9706279317	Book 17 Keeps Score	84
	central asia	saturday	1	9703746207	Paradise Sky by Jose Lansdale	16
	eastern europe	wednesday	1	9729473006	The spy and the traitor	74
	southeast asia	wednesday	3	9706279301	A Gentleman Never Keeps Score	180
	southern africa	saturday	4	9702833319	Book 19 day friends	287
	central asia	tuesday	5	9793937413	Book 13 for you	14
	central africa	wednesday	5	9728304810	Book 10 for Texas	72
	south of europe	saturday	5	9706279301	A Gentleman Never Keeps Score	30
	western europe	sunday	5	9706279301	A Gentleman Never Keeps Score	90
	australia	friday	6	9793937405	Tell me you are mine	270
	south of europe	saturday	7	9706279301	A Gentleman Never Keeps Score	210
	northern of asia	monday	7	9793937413	Book 13 for you	581
	caribe	tuesday	7	9793937405	Tell me you are mine	225
	eastern asia	thursday	7	9703746207	Paradise Sky by Jose Lansdale	112
	western europe	tuesday	9	9729473014	Book 14 for the spy and the tra...	637
	south america	friday	10	9739482716	Book 16 for the Niah Charter	15

Query 2

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```
-- 2.- Obtain annual sales per book YEAR, ISBN, TITLE, SALES_AMOUNT
select distinct
an.year as "year",
p.isbn as "isbn",
p.title as "title",
sum(t.sell_by_product) as "total_sales"
from
olap_bookshop.year an,
olap_bookshop.books p,
olap_bookshop.facts_ticket t
where
t.books_isbn= p.isbn
group by
an.year,
p.isbn
order by
p.isbn asc;
```

Result Grid

Filter Rows:

Export:

Wrap Cell Content:

	year	isbn	title	total_sales
▶	2017	9702833319	Book 19 day friends	779
	2017	9703746207	Paradise Sky by Jose Lansdale	272
	2017	9703859304	Crazy Rich Asians	1080
	2017	9703859312	Book 12 for Crazy Rich Asians	275
	2017	9703859320	Book 20 Asians	198
	2017	9703859321	Book 21 for the Bible	27
	2017	9706279301	A Gentleman Never Keeps Score	510
	2017	9706279317	Book 17 Keeps Score	126
	2017	9728304802	Texas Glory	56
	2017	9728304810	Book 10 for Texas	156
	2017	9728304818	Book 18 Glory	35
	2017	9729473006	The spy and the traitor	296
	2017	9729473014	Book 14 for the spy and the tra...	1001
	2017	9739482716	Book 16 for the Nigh Charter	120
	2017	9793937405	Tell me you are mine	720
	2017	9793937413	Book 13 for you	761

Query 3

Don't Limit

```

47      -- 3.- Obtain which region had the most transactions during Oc
48      with ventas_month as (
49          select
50              r.region_name,
51              count(f.ticket_number) as count
52          from
53              olap_bookshop.region r,
54              olap_bookshop.facts_ticket f,
55              olap_bookshop.day d,
56              olap_bookshop.month m,
57              olap_bookshop.warehouse t,
58              olap_bookshop.subregion s
59          where
60              m.month = 'october' and
61              f.day_id = d.day_id and
62              d.month_id=m.month_id and
63              f.warehouse_code = t.code and
64              t.subregion_id = s.subregion_id and
65              s.region_id = r.region_id
66          group by r.region_name)
67      select region_name, max(count)
68      from
69      ventas_month
70      group by region_name;
71
72
73

```

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Result Grid

Filter Rows:

Export:

Wrap Cell Content:

	region_name	max(count)
▶	oceania	1

Query 4

74
75 -- 4.- Obtain the average of the sale per ticket (invoice) p
76 • select
77 r.region_name,
78 m.month,
79 avg(f.sell_by_product)
80 from
81 olap_bookshop.region r,
82 olap_bookshop.facts_ticket f,
83 olap_bookshop.day d,
84 olap_bookshop.month m,
85 olap_bookshop.warehouse t,
86 olap_bookshop.subregion s
87 where
88 f.day_id = d.day_id and
89 d.month_id=m.month_id and
90 f.warehouse_code= t.code and
91 t.subregion_id = s.subregion_id and
92 s.region_id = r.region_id
93 group by
94 r.region_name,
95 m.month
96 order by
97 r.region_name;
98

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Result Grid | Filter Rows: | Export: | Wrap Cell Content: [fA](#)

	region_name	month	avg(f.sell_by_product)
▶	africa	april	72
	africa	august	840
	africa	december	96
	africa	february	254.5
	africa	july	246
	africa	march	42
	africa	november	84
	america	august	224
	america	march	130
	america	november	15
	asia	april	16
	asia	august	581
	asia	december	63
	asia	february	41.5
	asia	june	56
	asia	may	173
	asia	november	84

Query 5

```

101
102 -- 5.- Get which books are bought together more frequently by OLAP (SQL)
103 • with prod1 as (
104     select
105     f.ticket_number,
106     p.title
107     from
108     olap_bookshop.books p,
109     olap_bookshop.facts_ticket f
110     where
111     p.isbn = f.books_isbn
112     group by f.ticket_number, p.title
113 )
114     select prod1.title, pr.title
115     from olap_bookshop.books pr, olap_bookshop.facts_ticket t, prod1
116     where t.ticket_number = prod1.ticket_number
117

```

Result Grid			Filter Rows:	Export:	Wrap Cell Content:	Fetch rows:
	title	title				
▶	Book 13 for you	Rainy day friends				
	Texas Glory	Rainy day friends				
	A Gentleman Never Keeps Score	Rainy day friends				
	Book 19 day friends	Rainy day friends				
	Book 13 for you	Book 11 for Rainy day				
	Texas Glory	Book 11 for Rainy day				
	A Gentleman Never Keeps Score	Book 11 for Rainy day				
	Book 19 day friends	Book 11 for Rainy day				
	Book 13 for you	Book 19 day friends				
	Texas Glory	Book 19 day friends				
	A Gentleman Never Keeps Score	Book 19 day friends				
	Book 19 day friends	Book 19 day friends				
	Book 13 for you	Paradaise Sky by Jos...				
	Texas Glory	Paradaise Sky by Jos...				
	A Gentleman Never Keeps Score	Paradaise Sky by Jos...				
	Book 19 day friends	Paradaise Sky by Jos...				
	Book 13 for you	Crazy Rich Asians				
	Texas Glory	Crazy Rich Asians				
	A Gentleman Never Keeps Score	Crazy Rich Asians				
	Book 19 day friends	Crazy Rich Asians				
	Book 13 for you	Book 12 for Crazy Ric...				

Tables

The screenshot displays the MySQL Workbench interface. The top toolbar includes icons for file operations, editing, and database management. The menu bar contains File, Edit, View, Query, Database, Server, Tools, Scripting, and Help. The main window shows a SQL query in the 'Query' tab, which includes several SET statements and a SHOW TABLES command. The 'Result Grid' tab is active, showing a list of tables in the 'OLAP_BOOKSHOP' database. The 'Output' tab is also visible, showing the results of the query execution. A small window titled '*F:\Short Courses\Business Inte...' is open in the foreground, partially obscuring the Workbench interface. The Windows taskbar at the bottom shows various application icons and the system clock indicating 11:44 AM.

MySQL Workbench

Mysql@localhost:3306 - Warn...

File Edit View Query Database Server Tools Scripting Help

OLAP_BOOKSHOP DDL inserts to tables* Query* SQL File 4*

Limit to 100 rows

```
109 ENGINE = InnoDB;
110 SET SQL_MODE=@OLD_SQL_MODE;
111 SET FOREIGN_KEY_CHECKS=@OLD_FOREIGN_KEY_CHECKS;
112 SET UNIQUE_CHECKS=@OLD_UNIQUE_CHECKS;
113
114
115 SHOW TABLES
116
```

Result Grid Filter Rows: Export: Wrap Cell Contents: [?](#)

Tables_in_olap_bookshop
books
day
facts_ticket
month
region
subregion
warehouse
year

Result 5

Output

Action Output

#	Time	Action
---	------	--------

Message

Duration / Fetch

*F:\Short Courses\Business Inte...

11:44 AM