```sql
 1  -- 1. obtain the total daily sales by book and subregion subregion, day, isbn, title
 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: ĀA

subregion	day	num_day	ISBN	title	total_sales
east africa	wednesday	1	9706279317	Book 17 Keeps Score	84
central asia	saturday	1	9703746207	Paradaise 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	Paradaise 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 Nigh Charter	15

Query 2

```sql
26
27      -- 2.- Obtain annual sales per book YEAR, ISBN, TITLE, SALES_AMOUNT
28 •    select distinct
29      an.year as "year",
30      p.isbn as "isbn",
31      p.title as "title",
32      sum(t.sell_by_product) as "total_sales"
33      from
34      olap_bookshop.year an,
35      olap_bookshop.books p,
36      olap_bookshop.facts_ticket t
37      where
38      t.books_isbn= p.isbn
39      group by
40      an.year,
41      p.isbn
42      order by
43      p.isbn asc;
44
45
46
```

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

year	isbn	title	total_sales
2017	9702833319	Book 19 day friends	779
2017	9703746207	Paradaise 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

```sql
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
```

Result Grid | Filter Rows: [_____] | Export: | Wrap Cell Content: ⫶A

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
```

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

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: ⊼A | 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