

DDL QUERIES FOR BOOKSTORE

```
create database if not exists olap_bookstore;
```

```
use olap_bookstore;
```

```
CREATE TABLE IF NOT EXISTS region (  
    id_region INT PRIMARY KEY,  
    name VARCHAR(100)  
);
```

```
CREATE TABLE IF NOT EXISTS sub_region (  
    id_sub_region INT,  
    name VARCHAR(100),  
    region INT REFERENCES region (region_id),  
    PRIMARY KEY (id_sub_region , region)  
);
```

```
CREATE TABLE IF NOT EXISTS warehouse (  
    code INT,  
    sub_region_id INT REFERENCES sub_region (id_sub_region),  
    PRIMARY KEY (code , sub_region_id)  
);
```

```
CREATE TABLE IF NOT EXISTS year (  
    year_id INT PRIMARY KEY,  
    year INT(4)  
);
```

```
CREATE TABLE IF NOT EXISTS month (  
    month INT,  
    month_name VARCHAR(15),  
    year INT REFERENCES year (year_id),  
    PRIMARY KEY (month , year)  
);
```

```
CREATE TABLE IF NOT EXISTS day (  
    Day_id INT,  
    day VARCHAR(45),  
    month INT REFERENCES month (month),  
    num_day INT,  
    PRIMARY KEY (Day_id , month)  
);
```

```

CREATE TABLE IF NOT EXISTS books (
    isbn INT PRIMARY KEY,
    title VARCHAR(45),
    price DECIMAL(5 , 2 )
);
CREATE TABLE IF NOT EXISTS ticket (
    id_ticket INT,
    code INT REFERENCES warehouse (code),
    isbn INT REFERENCES books (isbn),
    Day_id INT REFERENCES day (Day_id),
    product_Sale DOUBLE,
    PRIMARY KEY (id_ticket , code , isbn , Day_id)
);

```

INSERT QUERIES FOR BOOKSTORE

Region table

```

insert into olap_bookstore.region(id_region,name) values
(1,'America'),(2,'Australia'),(3,'Asia'),(4,'Africa'),(5,'Europe');

```

Sub_region table

```

insert into olap_bookstore.sub_region(id_sub_region,region,name) values
(1,1,'California'),(2,1,'Mexico'),(3,1,'Canada'),(4,1,'Iceland');

```

```

insert into olap_bookstore.sub_region(id_sub_region,region,name) values
(5,2,'Sydney'),(6,2,'New South Wales'),(7,2,'Quensland'),(8,2,'Northern Territory');

```

```

insert into olap_bookstore.sub_region(id_sub_region,region,name) values (9,3,'Northern of
Asia'),(10,3,'Southern Asia'),(11,3,'Eastern Asia'),(12,3,'Central Asia'),(13,3,'southeast asia');

```

```

insert into olap_bookstore.sub_region(id_sub_region,region,name) values (14,4,'North
Africa'),(15,4,'Southern Africa'),(16,4,'West Africa'),(17,4,'East Africa'),(18,4,'Central Africa');

```

```

insert into olap_bookstore.sub_region(id_sub_region,region,name) values (19,5,'Central
Europe'),(20,5,'East-Central Europe'),(21,5,'Northern Europe'),(22,5,'Southern Europe');

```

Year table

```
insert into olap_bookstore.year (year_id,year) values (1,'2019');
```

Month table

```
insert into olap_bookstore.month (month_id, year, Month_name) values  
(1,1,'January'),(2,1,'February'),(3,1,'March'),(4,1,'April'),(5,1,'May'),(6,1,'June'),(7,1,'July'),(8,1,'A  
ugust'),(9,1,'September'),(10,1,'October'),(11,1,'November'),(12,1,'December');
```

Day table

```
insert into olap_bookstore.day (Day_id, month, day, num_day)  
values (2,1,'monday',2);  
insert into olap_bookstore.day (Day_id, month, day, num_day)  
values (3,1,'tuesday',3);  
insert into olap_bookstore.day (Day_id, month, day, num_day)  
values (4,1,'wednesday',4);  
insert into olap_bookstore.day (Day_id, month, day, num_day)  
values (5,1,'thursday',5);  
insert into olap_bookstore.day (Day_id, month, day, num_day)  
values (6,1,'friday',6);  
insert into olap_bookstore.day (Day_id, month, day, num_day)  
values (7,1,'saturday',7);  
insert into olap_bookstore.day (Day_id, month, day, num_day)  
values (8,1,'sunday',8);  
insert into olap_bookstore.day (Day_id, month, day, num_day)  
values (9,1,'monday',9);  
insert into olap_bookstore.day (Day_id, month, day, num_day)  
values (10,1,'tuesday',10);  
insert into olap_bookstore.day (Day_id, month, day, num_day)  
values (11,1,'wednesday',11);  
insert into olap_bookstore.day (Day_id, month, day, num_day)  
values (12,1,'thursday',12);  
insert into olap_bookstore.day (Day_id, month, day, num_day)  
values (13,1,'friday',13);  
insert into olap_bookstore.day (Day_id, month, day, num_day)  
values (14,1,'saturday',14);  
insert into olap_bookstore.day (Day_id, month, day, num_day)  
values (15,1,'sunday',15);  
insert into olap_bookstore.day (Day_id, month, day, num_day)
```

```
values (16,1,'monday',16);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (17,1,'tuesday',17);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (18,1,'wednesday',18);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (19,1,'thursday',19);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (20,1,'friday',20);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (21,1,'saturday',21);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (22,1,'sunday',22);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (23,1,'monday',23);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (24,1,'tuesday',24);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (25,1,'wednesday',25);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (26,1,'thursday',26);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (27,1,'friday',27);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (28,1,'saturday',28);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (29,1,'sunday',29);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (30,1,'monday',30);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (31,1,'tuesday',31);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (32,2,'wednesday',1);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (33,2,'thursday',2);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (34,2,'friday',3);
insert into olap_bookstore.day (Day_id, month, day, num_day)
```

```
values (35,2,'saturday',4);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (36,2,'sunday',5);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (37,2,'monday',6);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (38,2,'tuesday',7);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (39,2,'wednesday',8);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (40,2,'thursday',9);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (41,2,'friday',10);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (42,2,'saturday',11);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (43,2,'sunday',12);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (44,2,'monday',13);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (45,2,'tuesday',14);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (46,2,'wednesday',15);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (47,2,'thursday',16);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (48,2,'friday',17);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (49,2,'saturday',18);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (50,2,'sunday',19);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (51,2,'monday',20);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (52,2,'tuesday',21);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (53,2,'wednesday',22);
insert into olap_bookstore.day (Day_id, month, day, num_day)
```

```
values (54,2,'thursday',23);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (55,2,'friday',24);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (56,2,'saturday',25);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (57,2,'sunday',26);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (58,2,'monday',27);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (59,2,'tuesday',28);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (60,3,'wednesday',1);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (61,3,'thursday',2);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (62,3,'friday',3);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (63,3,'saturday',4);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (64,3,'sunday',5);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (65,3,'monday',6);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (66,3,'tuesday',7);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (67,3,'wednesday',8);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (68,3,'thursday',9);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (69,3,'friday',10);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (70,3,'saturday',11);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (71,3,'sunday',12);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (72,3,'monday',13);
insert into olap_bookstore.day (Day_id, month, day, num_day)
```

```
values (73,3,'tuesday',14);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (74,3,'wednesday',15);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (75,3,'thursday',16);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (76,3,'friday',17);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (77,3,'saturday',18);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (78,3,'sunday',19);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (79,3,'monday',20);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (80,3,'tuesday',21);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (81,3,'wednesday',22);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (82,3,'thursday',23);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (83,3,'friday',24);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (84,3,'saturday',25);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (85,3,'sunday',26);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (86,3,'monday',27);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (87,3,'tuesday',28);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (88,3,'wednesday',29);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (89,3,'thursday',30);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (90,3,'friday',31);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (91,4,'saturday',1);
insert into olap_bookstore.day (Day_id, month, day, num_day)
```

```
values (92,4,'sunday',2);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (93,4,'monday',3);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (94,4,'tuesday',4);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (95,4,'wednesday',5);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (96,4,'thursday',6);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (97,4,'friday',7);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (98,4,'saturday',8);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (99,4,'sunday',9);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (100,4,'monday',10);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (101,4,'tuesday',11);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (102,4,'wednesday',12);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (103,4,'thursday',13);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (104,4,'friday',14);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (105,4,'saturday',15);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (106,4,'sunday',16);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (107,4,'monday',17);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (108,4,'tuesday',18);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (109,4,'wednesday',19);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (110,4,'thursday',20);
insert into olap_bookstore.day (Day_id, month, day, num_day)
```



```
values (111,4,'friday',21);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (112,4,'saturday',22);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (113,4,'sunday',23);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (114,4,'monday',24);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (115,4,'tuesday',25);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (116,4,'wednesday',26);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (117,4,'thursday',27);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (118,4,'friday',28);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (119,4,'saturday',29);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (120,4,'sunday',30);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (121,5,'monday',1);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (122,5,'tuesday',2);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (123,5,'wednesday',3);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (124,5,'thursday',4);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (125,5,'friday',5);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (126,5,'saturday',6);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (127,5,'sunday',7);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (128,5,'monday',8);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (129,5,'tuesday',9);
insert into olap_bookstore.day (Day_id, month, day, num_day)
```

```
values (130,5,'wednesday',10);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (131,5,'thursday',11);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (132,5,'friday',12);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (133,5,'saturday',13);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (134,5,'sunday',14);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (135,5,'monday',15);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (136,5,'tuesday',16);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (137,5,'wednesday',17);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (138,5,'thursday',18);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (139,5,'friday',19);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (140,5,'saturday',20);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (141,5,'sunday',21);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (142,5,'monday',22);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (143,5,'tuesday',23);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (144,5,'wednesday',24);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (145,5,'thursday',25);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (146,5,'friday',26);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (147,5,'saturday',27);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (148,5,'sunday',28);
insert into olap_bookstore.day (Day_id, month, day, num_day)
```

```
values (149,5,'monday',29);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (150,5,'tuesday',30);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (151,5,'wednesday',31);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (152,6,'thursday',1);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (153,6,'friday',2);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (154,6,'saturday',3);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (155,6,'sunday',4);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (156,6,'monday',5);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (157,6,'tuesday',6);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (158,6,'wednesday',7);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (159,6,'thursday',8);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (160,6,'friday',9);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (161,6,'saturday',10);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (162,6,'sunday',11);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (163,6,'monday',12);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (164,6,'tuesday',13);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (165,6,'wednesday',14);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (166,6,'thursday',15);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (167,6,'friday',16);
insert into olap_bookstore.day (Day_id, month, day, num_day)
```

```
values (168,6,'saturday',17);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (169,6,'sunday',18);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (170,6,'monday',19);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (171,6,'tuesday',20);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (172,6,'wednesday',21);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (173,6,'thursday',22);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (174,6,'friday',23);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (175,6,'saturday',24);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (176,6,'sunday',25);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (177,6,'monday',26);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (178,6,'tuesday',27);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (179,6,'wednesday',28);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (180,6,'thursday',29);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (181,6,'friday',30);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (182,7,'saturday',1);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (183,7,'sunday',2);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (184,7,'monday',3);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (185,7,'tuesday',4);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (186,7,'wednesday',5);
insert into olap_bookstore.day (Day_id, month, day, num_day)
```

```
values (187,7,'thursday',6);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (188,7,'friday',7);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (189,7,'saturday',8);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (190,7,'sunday',9);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (191,7,'monday',10);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (192,7,'tuesday',11);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (193,7,'wednesday',12);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (194,7,'thursday',13);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (195,7,'friday',14);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (196,7,'saturday',15);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (197,7,'sunday',16);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (198,7,'monday',17);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (199,7,'tuesday',18);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (200,7,'wednesday',19);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (201,7,'thursday',20);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (202,7,'friday',21);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (203,7,'saturday',22);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (204,7,'sunday',23);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (205,7,'monday',24);
insert into olap_bookstore.day (Day_id, month, day, num_day)
```

```
values (206,7,'tuesday',25);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (207,7,'wednesday',26);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (208,7,'thursday',27);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (209,7,'friday',28);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (210,7,'saturday',29);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (211,7,'sunday',30);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (212,7,'monday',31);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (213,8,'tuesday',1);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (214,8,'wednesday',2);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (215,8,'thursday',3);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (216,8,'friday',4);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (217,8,'saturday',5);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (218,8,'sunday',6);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (219,8,'monday',7);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (220,8,'tuesday',8);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (221,8,'wednesday',9);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (222,8,'thursday',10);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (223,8,'friday',11);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (224,8,'saturday',12);
insert into olap_bookstore.day (Day_id, month, day, num_day)
```

```
values (225,8,'sunday',13);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (226,8,'monday',14);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (227,8,'tuesday',15);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (228,8,'wednesday',16);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (229,8,'thursday',17);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (230,8,'friday',18);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (231,8,'saturday',19);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (232,8,'sunday',20);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (233,8,'monday',21);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (234,8,'tuesday',22);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (235,8,'wednesday',23);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (236,8,'thursday',24);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (237,8,'friday',25);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (238,8,'saturday',26);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (239,8,'sunday',27);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (240,8,'monday',28);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (241,8,'tuesday',29);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (242,8,'wednesday',30);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (243,8,'thursday',31);
insert into olap_bookstore.day (Day_id, month, day, num_day)
```

```
values (244,9,'friday',1);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (245,9,'saturday',2);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (246,9,'sunday',3);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (247,9,'monday',4);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (248,9,'tuesday',5);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (249,9,'wednesday',6);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (250,9,'thursday',7);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (251,9,'friday',8);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (252,9,'saturday',9);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (253,9,'sunday',10);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (254,9,'monday',11);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (255,9,'tuesday',12);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (256,9,'wednesday',13);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (257,9,'thursday',14);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (258,9,'friday',15);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (259,9,'saturday',16);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (260,9,'sunday',17);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (261,9,'monday',18);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (262,9,'tuesday',19);
insert into olap_bookstore.day (Day_id, month, day, num_day)
```



```
values (263,9,'wednesday',20);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (264,9,'thursday',21);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (265,9,'friday',22);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (266,9,'saturday',23);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (267,9,'sunday',24);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (268,9,'monday',25);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (269,9,'tuesday',26);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (270,9,'wednesday',27);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (271,9,'thursday',28);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (272,9,'friday',29);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (273,9,'saturday',30);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (274,10,'sunday',1);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (275,10,'monday',2);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (276,10,'tuesday',3);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (277,10,'wednesday',4);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (278,10,'thursday',5);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (279,10,'friday',6);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (280,10,'saturday',7);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (281,10,'sunday',8);
insert into olap_bookstore.day (Day_id, month, day, num_day)
```

```
values (282,10,'monday',9);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (283,10,'tuesday',10);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (284,10,'wednesday',11);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (285,10,'thursday',12);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (286,10,'friday',13);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (287,10,'saturday',14);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (288,10,'sunday',15);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (289,10,'monday',16);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (290,10,'tuesday',17);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (291,10,'wednesday',18);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (292,10,'thursday',19);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (293,10,'friday',20);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (294,10,'saturday',21);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (295,10,'sunday',22);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (296,10,'monday',23);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (297,10,'tuesday',24);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (298,10,'wednesday',25);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (299,10,'thursday',26);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (300,10,'friday',27);
insert into olap_bookstore.day (Day_id, month, day, num_day)
```

```
values (301,10,'saturday',28);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (302,10,'sunday',29);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (303,10,'monday',30);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (304,10,'tuesday',31);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (305,11,'wednesday',1);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (306,11,'thursday',2);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (307,11,'friday',3);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (308,11,'saturday',4);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (309,11,'sunday',5);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (310,11,'monday',6);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (311,11,'tuesday',7);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (312,11,'wednesday',8);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (313,11,'thursday',9);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (314,11,'friday',10);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (315,11,'saturday',11);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (316,11,'sunday',12);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (317,11,'monday',13);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (318,11,'tuesday',14);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (319,11,'wednesday',15);
insert into olap_bookstore.day (Day_id, month, day, num_day)
```

```
values (320,11,'thursday',16);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (321,11,'friday',17);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (322,11,'saturday',18);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (323,11,'sunday',19);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (324,11,'monday',20);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (325,11,'tuesday',21);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (326,11,'wednesday',22);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (327,11,'thursday',23);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (328,11,'friday',24);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (329,11,'saturday',25);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (330,11,'sunday',26);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (331,11,'monday',27);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (332,11,'tuesday',28);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (333,11,'wednesday',29);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (334,11,'thursday',30);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (335,12,'friday',1);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (336,12,'saturday',2);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (337,12,'sunday',3);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (338,12,'monday',4);
insert into olap_bookstore.day (Day_id, month, day, num_day)
```

```
values (339,12,'tuesday',5);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (340,12,'wednesday',6);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (341,12,'thursday',7);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (342,12,'friday',8);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (343,12,'saturday',9);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (344,12,'sunday',10);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (345,12,'monday',11);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (346,12,'tuesday',12);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (347,12,'wednesday',13);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (348,12,'thursday',14);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (349,12,'friday',15);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (350,12,'saturday',16);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (351,12,'sunday',17);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (352,12,'monday',18);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (353,12,'tuesday',19);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (354,12,'wednesday',20);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (355,12,'thursday',21);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (356,12,'friday',22);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (357,12,'saturday',23);
insert into olap_bookstore.day (Day_id, month, day, num_day)
```

```
values (358,12,'sunday',24);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (359,12,'monday',25);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (360,12,'tuesday',26);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (361,12,'wednesday',27);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (362,12,'thursday',28);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (363,12,'friday',29);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (364,12,'saturday',30);
insert into olap_bookstore.day (Day_id, month, day, num_day)
values (365,12,'sunday',31);
```

Warehouse table

```
insert into olap_bookstore.warehouse (code, sub_region_id) values
(1,1);
insert into olap_bookstore.warehouse (code, sub_region_id) values
(2,1);
insert into olap_bookstore.warehouse (code, sub_region_id) values
(3,2);
insert into olap_bookstore.warehouse (code, sub_region_id) values
(4,2);
insert into olap_bookstore.warehouse (code, sub_region_id) values
(5,3);
insert into olap_bookstore.warehouse (code, sub_region_id) values
(6,3);
insert into olap_bookstore.warehouse (code, sub_region_id) values
(7,4);
insert into olap_bookstore.warehouse (code, sub_region_id) values
(8,4);
insert into olap_bookstore.warehouse (code, sub_region_id) values
(9,5);
insert into olap_bookstore.warehouse (code, sub_region_id) values
(10,5);
insert into olap_bookstore.warehouse (code, sub_region_id) values
```

(11,6);
insert into olap_bookstore.warehouse (code, sub_region_id) values
(12,6);
insert into olap_bookstore.warehouse (code, sub_region_id) values
(13,7);
insert into olap_bookstore.warehouse (code, sub_region_id) values
(14,7);
insert into olap_bookstore.warehouse (code, sub_region_id) values
(15,8);
insert into olap_bookstore.warehouse (code, sub_region_id) values
(16,8);
insert into olap_bookstore.warehouse (code, sub_region_id) values
(17,9);
insert into olap_bookstore.warehouse (code, sub_region_id) values
(18,9);
insert into olap_bookstore.warehouse (code, sub_region_id) values
(19,10);
insert into olap_bookstore.warehouse (code, sub_region_id) values
(20,10);
insert into olap_bookstore.warehouse (code, sub_region_id) values
(22,11);
insert into olap_bookstore.warehouse (code, sub_region_id) values
(21,11);
insert into olap_bookstore.warehouse (code, sub_region_id) values
(23,12);
insert into olap_bookstore.warehouse (code, sub_region_id) values
(24,12);
insert into olap_bookstore.warehouse (code, sub_region_id) values
(25,13);
insert into olap_bookstore.warehouse (code, sub_region_id) values
(26,13);
insert into olap_bookstore.warehouse (code, sub_region_id) values
(27,14);
insert into olap_bookstore.warehouse (code, sub_region_id) values
(28,14);
insert into olap_bookstore.warehouse (code, sub_region_id) values
(29,15);
insert into olap_bookstore.warehouse (code, sub_region_id) values

```
(30,15);
insert into olap_bookstore.warehouse (code, sub_region_id) values
(31,16);
insert into olap_bookstore.warehouse (code, sub_region_id) values
(32,16);
insert into olap_bookstore.warehouse (code, sub_region_id) values
(33,17);
insert into olap_bookstore.warehouse (code, sub_region_id) values
(34,17);
insert into olap_bookstore.warehouse (code, sub_region_id) values
(35,18);
insert into olap_bookstore.warehouse (code, sub_region_id) values
(36,18);
insert into olap_bookstore.warehouse (code, sub_region_id) values
(37,19);
insert into olap_bookstore.warehouse (code, sub_region_id) values
(38,19);
insert into olap_bookstore.warehouse (code, sub_region_id) values
(39,20);
insert into olap_bookstore.warehouse (code, sub_region_id) values
(40,20);
insert into olap_bookstore.warehouse (code, sub_region_id) values
(41,21);
insert into olap_bookstore.warehouse (code, sub_region_id) values
(42,21);
insert into olap_bookstore.warehouse (code, sub_region_id) values
(43,22);
insert into olap_bookstore.warehouse (code, sub_region_id) values
(44,22);
```


Books table

```
INSERT INTO olap_bookstore.books (isbn, title, price) VALUES
(9706279301,'A Gentleman Never Keeps Score',384.00);
INSERT INTO olap_bookstore.books (isbn, title, price) VALUES
(9728304802,'Texas Glory',94.50);
INSERT INTO olap_bookstore.books (isbn, title, price) VALUES
(9702833303,'Rainy day friends',45.00);
INSERT INTO olap_bookstore.books (isbn, title, price) VALUES
(9703859304,'Crazy Rich Asians',1234.50);
INSERT INTO olap_bookstore.books (isbn, title, price) VALUES
(9793937405,'Tell me you are mine',23.60);
INSERT INTO olap_bookstore.books (isbn, title, price) VALUES
(9729473006,'The spy and the traitor',200.00);
INSERT INTO olap_bookstore.books (isbn, title, price) VALUES
(9703746207,'Paradise Sky by Jose Lansdale',145.00);
INSERT INTO olap_bookstore.books (isbn, title, price) VALUES
(9739482708,'Meet Camaro from the Nigh Charter',165.99);
INSERT INTO olap_bookstore.books (isbn, title, price) VALUES
(9706279309,'Book 9 for A Gentleman',344.00);
INSERT INTO olap_bookstore.books (isbn, title, price) VALUES
(9728304810,'Book 10 for Texas',84.50);
INSERT INTO olap_bookstore.books (isbn, title, price) VALUES
(9702833311,'Book 11 for Rainy day',75.00);
INSERT INTO olap_bookstore.books (isbn, title, price) VALUES
(9703859312,'Book 12 for Crazy Rich Asians',124.50);
INSERT INTO olap_bookstore.books (isbn, title, price) VALUES
(9793937413,'Book 13 for you',23.60);
INSERT INTO olap_bookstore.books (isbn, title, price) VALUES
(9729473014,'Book 14 for the spy and the traitor',240.00);
INSERT INTO olap_bookstore.books (isbn, title, price) VALUES
(9793937415,'Book 15 for the Sky ',135.00);
INSERT INTO olap_bookstore.books (isbn, title, price) VALUES
(9739482716,'Book 16 for the Nigh Charter',125.99);
INSERT INTO olap_bookstore.books (isbn, title, price) VALUES
(9706279317,'Book 17 Keeps Score',314.00);
INSERT INTO olap_bookstore.books (isbn, title, price) VALUES
(9728304818,'Book 18 Glory',84.50);
INSERT INTO olap_bookstore.books (isbn, title, price) VALUES
```

```
(9702833319,'Book 19 day friends',65.00);  
INSERT INTO olap_bookstore.books (isbn, title, price) VALUES  
(9703859320,'Book 20 Asians',1434.50);  
INSERT INTO olap_bookstore.books (isbn, title, price) VALUES  
(9703859321,'Book 21 for the Bible',1434.50);
```

Ticket table

```
INSERT INTO olap_bookstore.ticket (day_id, code,  
isbn, product_Sale, id_ticket) VALUES  
(52,14,9703859312,275,1);  
INSERT INTO olap_bookstore.ticket (day_id, code,  
isbn, product_Sale, id_ticket) VALUES  
(345,10,9703746207,48,1);  
INSERT INTO olap_bookstore.ticket (day_id, code,  
isbn, product_Sale, id_ticket) VALUES  
(314,7,9739482716,15,1);  
INSERT INTO olap_bookstore.ticket (day_id, code,  
isbn, product_Sale, id_ticket) VALUES  
(50,17,9703746215,56,1);  
INSERT INTO olap_bookstore.ticket (day_id, code,  
isbn, product_Sale, id_ticket) VALUES  
(6,37,9793937405,270,1);  
INSERT INTO olap_bookstore.ticket (day_id, code,  
isbn, product_Sale, id_ticket) VALUES  
(358,31,9703746207,96,2);  
INSERT INTO olap_bookstore.ticket (day_id, code,  
isbn, product_Sale, id_ticket) VALUES  
(223,8,9703746215,84,2);  
INSERT INTO olap_bookstore.ticket (day_id, code,  
isbn, product_Sale, id_ticket) VALUES  
(91,23,9703746207,16,2);  
INSERT INTO olap_bookstore.ticket (day_id, code,  
isbn, product_Sale, id_ticket) VALUES  
(142,24,9793937413,166,3);  
INSERT INTO olap_bookstore.ticket (day_id, code,  
isbn, product_Sale, id_ticket) VALUES  
(123,25,9706279301,180,3);  
INSERT INTO olap_bookstore.ticket (day_id, code,
```

```
isbn, product_Sale, id_ticket) VALUES
(339,23,9793937413,14,3);
INSERT INTO olap_bookstore.ticket (day_id, code,
isbn, product_Sale, id_ticket) VALUES
(35,29,9702833319,287,3);
INSERT INTO olap_bookstore.ticket (day_id, code,
isbn, product_Sale, id_ticket) VALUES
(167,22,9728304802,56,3);
INSERT INTO olap_bookstore.ticket (day_id, code,
isbn, product_Sale, id_ticket) VALUES
(64,13,9706279301,90,4);
INSERT INTO olap_bookstore.ticket (day_id, code,
isbn, product_Sale, id_ticket) VALUES
(219,18,9793937413,581,4);
INSERT INTO olap_bookstore.ticket (day_id, code,
isbn, product_Sale, id_ticket) VALUES
(129,14,9729473014,637,6);
INSERT INTO olap_bookstore.ticket (day_id, code,
isbn, product_Sale, id_ticket) VALUES
(60,16,9729473006,74,6);
INSERT INTO olap_bookstore.ticket (day_id, code,
isbn, product_Sale, id_ticket) VALUES
(7,12,9706279301,210,7);
INSERT INTO olap_bookstore.ticket (day_id, code,
isbn, product_Sale, id_ticket) VALUES
(329,24,9728304810,84,7);
INSERT INTO olap_bookstore.ticket (day_id, code,
isbn, product_Sale, id_ticket) VALUES
(344,38,9793937405,225,7);
INSERT INTO olap_bookstore.ticket (day_id, code,
isbn, product_Sale, id_ticket) VALUES
(328,10,9739482716,105,7);
INSERT INTO olap_bookstore.ticket (day_id, code,
isbn, product_Sale, id_ticket) VALUES
(239,32,9703859304,840,8);
INSERT INTO olap_bookstore.ticket (day_id, code,
isbn, product_Sale, id_ticket) VALUES
(66,6,9793937405,225,8);
```

```
INSERT INTO olap_bookstore.ticket (day_id, code,
isbn, product_Sale, id_ticket) VALUES
(44,30,9729473006,222,8);
INSERT INTO olap_bookstore.ticket (day_id, code,
isbn, product_Sale, id_ticket) VALUES
(355,10,9703859320,198,9);
INSERT INTO olap_bookstore.ticket (day_id, code,
isbn, product_Sale, id_ticket) VALUES
(54,13,9702833319,246,9);
INSERT INTO olap_bookstore.ticket (day_id, code,
isbn, product_Sale, id_ticket) VALUES
(296,37,9703859304,240,10);
INSERT INTO olap_bookstore.ticket (day_id, code,
isbn, product_Sale, id_ticket) VALUES
(49,18,9703859321,27,10);
INSERT INTO olap_bookstore.ticket (day_id, code,
isbn, product_Sale, id_ticket) VALUES
(233,6,9729473014,364,11);
INSERT INTO olap_bookstore.ticket (day_id, code,
isbn, product_Sale, id_ticket) VALUES
(88,5,9728304818,35,11);
INSERT INTO olap_bookstore.ticket (day_id, code,
isbn, product_Sale, id_ticket) VALUES
(95,36,9728304810,72,11);
INSERT INTO olap_bookstore.ticket (day_id, code,
isbn, product_Sale, id_ticket) VALUES
(341,21,9703746207,112,11);
INSERT INTO olap_bookstore.ticket (day_id, code,
isbn, product_Sale, id_ticket) VALUES
(217,11,9706279301,30,11);
INSERT INTO olap_bookstore.ticket (day_id, code,
isbn, product_Sale, id_ticket) VALUES
(80,27,9706279317,42,13);
INSERT INTO olap_bookstore.ticket (day_id, code,
isbn, product_Sale, id_ticket) VALUES
(206,28,9702833319,246,13);
INSERT INTO olap_bookstore.ticket (day_id, code,
isbn, product_Sale, id_ticket) VALUES
```

(305,34,9706279317,84,13);

SELECT QUERIES

1) Total daily sales by book and subregion

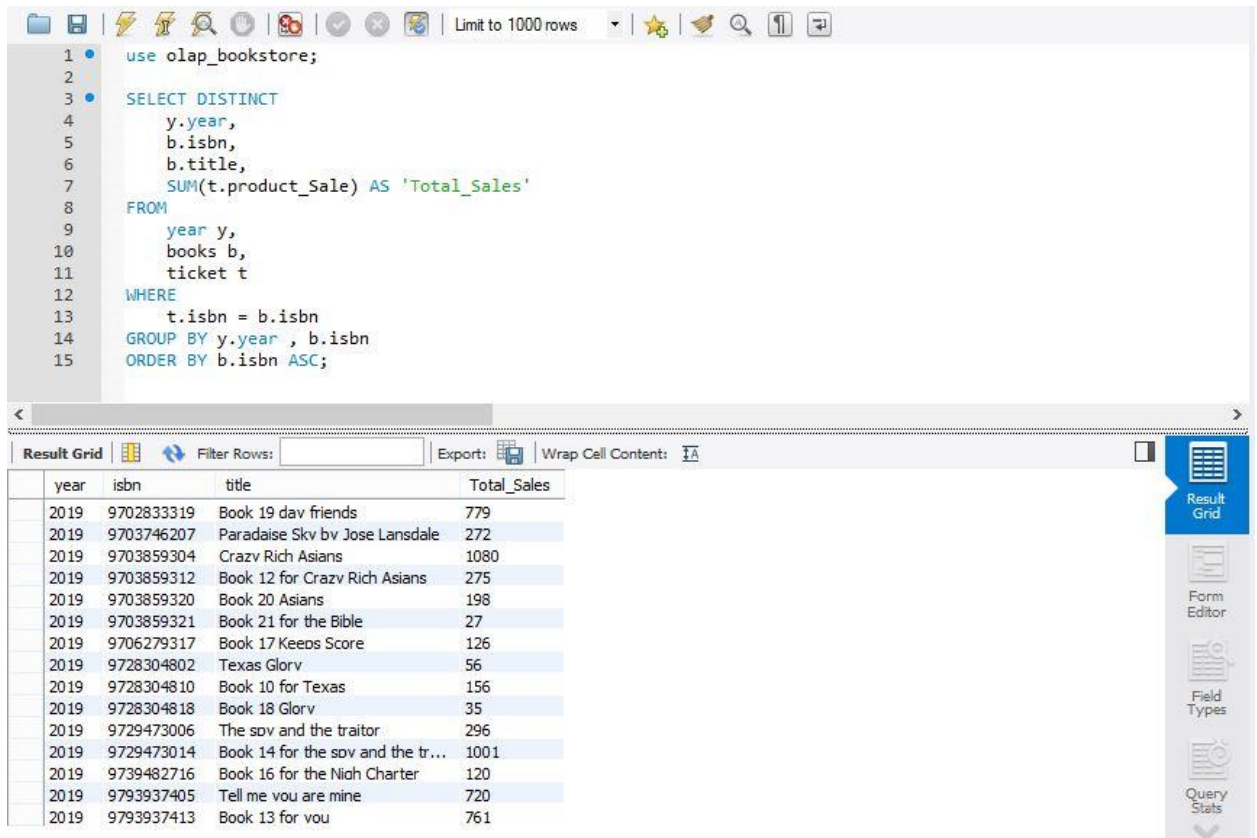
The screenshot shows a database query editor with a SQL query and its results. The query is as follows:

```
SELECT DISTINCT
  s.name,
  d.day,
  d.num_day,
  b.isbn,
  b.title,
  SUM(t.product_Sale) AS 'Total_Sales'
FROM
  sub_region s,
  day d,
  books b,
  ticket t,
  warehouse w
WHERE
  t.code = w.code AND w.sub_region_id
  AND t.day_id = d.day_id
  AND t.isbn = b.isbn
GROUP BY s.name, d.day, d.num_day, b.isbn
ORDER BY num_day ASC
```

The results are displayed in a grid with the following columns: name, day, num_day, isbn, title, and Total_Sales. The data is as follows:

name	day	num_day	isbn	title	Total_Sales
Central Asia	saturdav	1	9703746207	Paradaise Skv bv Jose Lansdale	16
Central Asia	wednesdav	1	9729473006	The sov and the traitor	74
Central Asia	wednesdav	1	9706279317	Book 17 Keeps Score	84
southeast asia	saturdav	1	9703746207	Paradaise Skv bv Jose Lansdale	16
southeast asia	wednesdav	1	9729473006	The sov and the traitor	74
southeast asia	wednesdav	1	9706279317	Book 17 Keeps Score	84
North Africa	saturdav	1	9703746207	Paradaise Skv bv Jose Lansdale	16
Southern Europe	wednesdav	1	9706279317	Book 17 Keeps Score	84
North Africa	wednesdav	1	9729473006	The sov and the traitor	74
Eastern Asia	wednesdav	1	9706279317	Book 17 Keeps Score	84
North Africa	wednesdav	1	9706279317	Book 17 Keeps Score	84

2) Annual sales per book



```
1 use olap_bookstore;
2
3 SELECT DISTINCT
4     y.year,
5     b.isbn,
6     b.title,
7     SUM(t.product_Sale) AS 'Total_Sales'
8 FROM
9     year y,
10    books b,
11    ticket t
12 WHERE
13     t.isbn = b.isbn
14 GROUP BY y.year , b.isbn
15 ORDER BY b.isbn ASC;
```

year	isbn	title	Total_Sales
2019	9702833319	Book 19 dav friends	779
2019	9703746207	Paradise Skv bv Jose Lansdale	272
2019	9703859304	Crazv Rich Asians	1080
2019	9703859312	Book 12 for Crazy Rich Asians	275
2019	9703859320	Book 20 Asians	198
2019	9703859321	Book 21 for the Bible	27
2019	9706279317	Book 17 Keeps Score	126
2019	9728304802	Texas Glorv	56
2019	9728304810	Book 10 for Texas	156
2019	9728304818	Book 18 Glorv	35
2019	9729473006	The sov and the traitor	296
2019	9729473014	Book 14 for the sov and the tr...	1001
2019	9739482716	Book 16 for the Nigh Charter	120
2019	9793937405	Tell me vou are mine	720
2019	9793937413	Book 13 for vou	761

3) Which region had the most transactions during October 2017

Query 1

```

1 use olap_bookstore;
2
3 SELECT
4     r.name, COUNT(t.id_ticket) AS count
5 FROM
6     region r,
7     ticket t,
8     day d,
9     month m,
10    warehouse w,
11    sub_region s
12 WHERE
13     m.month_name = 'October'
14     AND t.day_id = d.day_id
15     AND d.month = m.month_id
16     AND t.code = w.code
17     AND w.sub_region_id = s.id_sub_region
18     AND s.region = r.id_region
19 GROUP BY r.name;

```

Result Grid

name	count
Europe	1

Result Grid

4) The average of the sale per ticket (invoice) per month in each region

Query 1

```

1 use olap_bookstore;
2
3 SELECT
4     r.name, m.month_name, AVG(t.product_sale)
5 FROM
6     region r,
7     month m,
8     ticket t,
9     day d,
10    sub_region s,
11    warehouse w
12 WHERE
13     t.day_id = d.day_id
14     AND d.month = m.month_id
15     AND t.code = w.code
16     AND w.sub_region_id = s.id_sub_region
17     AND s.region = r.id_region
18 GROUP BY r.name, m.month_name
19 ORDER BY r.name ASC;

```

Result Grid

name	month_name	AVG(t.product_sale)
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

Result Grid

Form Editor

Field Types

5) Which books are bought together more frequently by OLAP (SQL)

Query 1

Limit to 1000 rows

```
1 • use olap_bookstore;
2
3 • with product as ( select t.id_ticket,b.title from ticket t,books b where b.isbn = t.isbn group by t.id_ticket)
4 • select product.title, pr.title from books pr,ticket f,product where f.id_ticket=product.id_ticket;
```

Result Grid

Filter Rows:

Export:

Wrap Cell Content:

	title	title
▶	Book 16 for the Nigh Charter	Rainy day friends
	Book 16 for the Nigh Charter	Book 11 for Rainy day
	Book 16 for the Nigh Charter	Book 19 day friends
	Book 16 for the Nigh Charter	Paradaise Sky by Jose Lansdale
	Book 16 for the Nigh Charter	Crazy Rich Asians
	Book 16 for the Nigh Charter	Book 12 for Crazy Rich Asians
	Book 16 for the Nigh Charter	Book 20 Asians
	Book 16 for the Nigh Charter	Book 21 for the Bible
	Book 16 for the Nigh Charter	A Gentleman Never Keeps Score

Result Grid

Form Editor