1.- DDL creates for OLAP database:

CREATE SCHEMA IF NOT EXISTS `OLAP_BOOKSHOP` DEFAULT CHARACTER SET utf8 ;

CREATE TABLE `books` (

 `ISBN` int NOT NULL,

 `TITLE` varchar(45) DEFAULT NULL,

 `PRICE` varchar(45) DEFAULT NULL,

 PRIMARY KEY (`ISBN`)

) ENGINE=InnoDB DEFAULT CHARSET=utf8;

CREATE TABLE `day` (

 `NUM_DAY` int NOT NULL,

 `DAY_ID` varchar(45) NOT NULL,

 `MONTH_ID` int NOT NULL,

 'DAY' VARCHAR(15) NOT NULL,

 PRIMARY KEY (`DAY_ID`,`MONTH_ID`),

 KEY `fk_DAY_MONTH1_idx` (`MONTH_ID`),

 CONSTRAINT `fk_DAY_MONTH1` FOREIGN KEY (`MONTH_ID`) REFERENCES `month` (`MONTH_ID`)

) ENGINE=InnoDB DEFAULT CHARSET=utf8;

CREATE TABLE `facts_ticket` (

 `SELL_BY_PRODUCT` double NOT NULL,

 `TICKET_NUMBER` int NOT NULL,

 `BOOKS_ISBN` int NOT NULL,

 `WAREHOUSE_CODE` int NOT NULL,

 `DAY_ID` varchar(45) NOT NULL,

 PRIMARY KEY (`SELL_BY_PRODUCT`,`BOOKS_ISBN`,`WAREHOUSE_CODE`,`DAY_ID`),

 KEY `fk_FACTS_TICKET_BOOKS1_idx` (`BOOKS_ISBN`),

 KEY `fk_FACTS_TICKET_WAREHOUSE1_idx` (`WAREHOUSE_CODE`),

 KEY `fk_FACTS_TICKET_DAY1_idx` (`DAY_ID`),

```sql
  CONSTRAINT `fk_FACTS_TICKET_BOOKS1` FOREIGN KEY (`BOOKS_ISBN`) REFERENCES `books` (`ISBN`),

  CONSTRAINT `fk_FACTS_TICKET_DAY1` FOREIGN KEY (`DAY_ID`) REFERENCES `day` (`DAY_ID`),

  CONSTRAINT `fk_FACTS_TICKET_WAREHOUSE1` FOREIGN KEY (`WAREHOUSE_CODE`) REFERENCES `warehouse` (`CODE`)
) ENGINE=InnoDB DEFAULT CHARSET=utf8;


CREATE TABLE `month` (

  `MONTH_ID` int NOT NULL,

  `MONTH` varchar(15) DEFAULT NULL,

  `YEAR_ID` int NOT NULL,

  PRIMARY KEY (`MONTH_ID`,`YEAR_ID`),

  KEY `fk_MONTH_YEAR1_idx` (`YEAR_ID`),

  CONSTRAINT `fk_MONTH_YEAR1` FOREIGN KEY (`YEAR_ID`) REFERENCES `year` (`YEAR_ID`)
) ENGINE=InnoDB DEFAULT CHARSET=utf8;


CREATE TABLE `region` (

  `REGION_ID` int NOT NULL,

  `REGION_NAME` varchar(20) NOT NULL,

  PRIMARY KEY (`REGION_ID`)
) ENGINE=InnoDB DEFAULT CHARSET=utf8;


CREATE TABLE `subregion` (

  `SUBREGION_ID` int NOT NULL,

  `SUBREGION_NAME` varchar(30) NOT NULL,

  `REGION_ID` int NOT NULL,

  PRIMARY KEY (`SUBREGION_ID`,`REGION_ID`),

  KEY `fk_SUBREGION_REGION_idx` (`REGION_ID`),

  CONSTRAINT `fk_SUBREGION_REGION` FOREIGN KEY (`REGION_ID`) REFERENCES `region` (`REGION_ID`)
) ENGINE=InnoDB DEFAULT CHARSET=utf8;


CREATE TABLE `warehouse` (

  `CODE` int NOT NULL,

  `SUBREGION_ID` int NOT NULL,

  PRIMARY KEY (`CODE`,`SUBREGION_ID`),
```

```
  KEY `fk_WAREHOUSE_SUBREGION1_idx` (`SUBREGION_ID`),

  CONSTRAINT `fk_WAREHOUSE_SUBREGION1` FOREIGN KEY (`SUBREGION_ID`) REFERENCES `subregion`
(`SUBREGION_ID`)

) ENGINE=InnoDB DEFAULT CHARSET=utf8;


CREATE TABLE `year` (

  `YEAR_ID` int NOT NULL,

  `YEAR` year DEFAULT NULL,

  PRIMARY KEY (`YEAR_ID`)

) ENGINE=InnoDB DEFAULT CHARSET=utf8;
```

2.- DDL inserts to tables

```
INSERT INTO olap_bookshop.region(region_id, region_name) VALUES (1,'Asia');

INSERT INTO olap_bookshop.region(region_id, region_name) VALUES (2,'America');

INSERT INTO olap_bookshop.region(region_id, region_name) VALUES (3,'Europe');

INSERT INTO olap_bookshop.region(region_id, region_name) VALUES (4,'Africa');

INSERT INTO olap_bookshop.region(region_id, region_name) VALUES (5,'Canada');


INSERT INTO olap_bookshop.subregion(subregion_id, region_id,subregion_name) VALUES (1,1,'north america');

INSERT INTO olap_bookshop.subregion(subregion_id, region_id,subregion_name) VALUES (2,1,'central america');

INSERT INTO olap_bookshop.subregion(subregion_id, region_id,subregion_name) VALUES (3,2,'north of europe');

INSERT INTO olap_bookshop.subregion(subregion_id, region_id,subregion_name) VALUES (4,2,'south of europe');

INSERT INTO olap_bookshop.subregion(subregion_id, region_id,subregion_name) VALUES (5,3,'northern of asia');

INSERT INTO olap_bookshop.subregion(subregion_id, region_id,subregion_name) VALUES (6,3,'southern asia');

INSERT INTO olap_bookshop.subregion(subregion_id, region_id,subregion_name) VALUES (7,4,'north africa');

INSERT INTO olap_bookshop.subregion(subregion_id, region_id,subregion_name) VALUES (8,4,'southern africa');

INSERT INTO olap_bookshop.subregion(subregion_id, region_id,subregion_name) VALUES (9,5,'micronesia');

INSERT INTO olap_bookshop.subregion(subregion_id, region_id,subregion_name) VALUES (10,5,'polynesia');


INSERT INTO olap_bookshop.year (year_id, year) VALUES (1,'2017');


INSERT INTO olap_bookshop.month (month_id, year_id, month) VALUES (1,1,'january');
```

```sql
INSERT INTO olap_bookshop.month (month_id, year_id, month) VALUES (2,1,'february');
INSERT INTO olap_bookshop.month (month_id, year_id, month) VALUES (3,1,'march');
INSERT INTO olap_bookshop.month (month_id, year_id, month) VALUES (4,1,'april');
INSERT INTO olap_bookshop.month (month_id, year_id, month) VALUES (5,1,'may');
INSERT INTO olap_bookshop.month (month_id, year_id, month) VALUES (6,1,'june');
INSERT INTO olap_bookshop.month (month_id, year_id, month) VALUES (7,1,'july');
INSERT INTO olap_bookshop.month (month_id, year_id, month) VALUES (8,1,'august');
INSERT INTO olap_bookshop.month (month_id, year_id, month) VALUES (9,1,'september');
INSERT INTO olap_bookshop.month (month_id, year_id, month) VALUES (10,1,'october');
INSERT INTO olap_bookshop.month (month_id, year_id, month) VALUES (11,1,'november');
INSERT INTO olap_bookshop.month (month_id, year_id, month) VALUES (12,1,'december');


INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (1,1,'sunday',1);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (2,1,'monday',2);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (3,1,'tuesday',3);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (4,1,'wednesday',4);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (5,1,'thursday',5);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (6,1,'friday',6);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (7,1,'saturday',7);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (8,1,'sunday',8);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (9,1,'monday',9);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (10,1,'tuesday',10);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (11,1,'wednesday',11);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (12,1,'thursday',12);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (13,1,'friday',13);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (14,1,'saturday',14);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (15,1,'sunday',15);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (16,1,'monday',16);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (17,1,'tuesday',17);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (18,1,'wednesday',18);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (19,1,'thursday',19);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (20,1,'friday',20);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (21,1,'saturday',21);
```

```sql
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (22,1,'sunday',22);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (23,1,'monday',23);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (24,1,'tuesday',24);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (25,1,'wednesday',25);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (26,1,'thursday',26);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (27,1,'friday',27);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (28,1,'saturday',28);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (29,1,'sunday',29);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (30,1,'monday',30);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (31,1,'tuesday',31);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (32,2,'wednesday',1);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (33,2,'thursday',2);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (34,2,'friday',3);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (35,2,'saturday',4);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (36,2,'sunday',5);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (37,2,'monday',6);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (38,2,'tuesday',7);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (39,2,'wednesday',8);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (40,2,'thursday',9);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (41,2,'friday',10);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (42,2,'saturday',11);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (43,2,'sunday',12);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (44,2,'monday',13);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (45,2,'tuesday',14);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (46,2,'wednesday',15);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (47,2,'thursday',16);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (48,2,'friday',17);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (49,2,'saturday',18);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (50,2,'sunday',19);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (51,2,'monday',20);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (52,2,'tuesday',21);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (53,2,'wednesday',22);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (54,2,'thursday',23);
```

```sql
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (55,2,'friday',24);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (56,2,'saturday',25);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (57,2,'sunday',26);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (58,2,'monday',27);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (59,2,'tuesday',28);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (60,3,'wednesday',1);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (61,3,'thursday',2);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (62,3,'friday',3);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (63,3,'saturday',4);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (64,3,'sunday',5);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (65,3,'monday',6);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (66,3,'tuesday',7);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (67,3,'wednesday',8);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (68,3,'thursday',9);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (69,3,'friday',10);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (70,3,'saturday',11);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (71,3,'sunday',12);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (72,3,'monday',13);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (73,3,'tuesday',14);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (74,3,'wednesday',15);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (75,3,'thursday',16);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (76,3,'friday',17);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (77,3,'saturday',18);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (78,3,'sunday',19);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (79,3,'monday',20);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (80,3,'tuesday',21);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (81,3,'wednesday',22);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (82,3,'thursday',23);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (83,3,'friday',24);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (84,3,'saturday',25);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (85,3,'sunday',26);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (86,3,'monday',27);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (87,3,'tuesday',28);
```

```sql
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (88,3,'wednesday',29);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (89,3,'thursday',30);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (90,3,'friday',31);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (91,4,'saturday',1);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (92,4,'sunday',2);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (93,4,'monday',3);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (94,4,'tuesday',4);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (95,4,'wednesday',5);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (96,4,'thursday',6);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (97,4,'friday',7);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (98,4,'saturday',8);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (99,4,'sunday',9);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (100,4,'monday',10);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (101,4,'tuesday',11);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (102,4,'wednesday',12);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (103,4,'thursday',13);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (104,4,'friday',14);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (105,4,'saturday',15);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (106,4,'sunday',16);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (107,4,'monday',17);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (108,4,'tuesday',18);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (109,4,'wednesday',19);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (110,4,'thursday',20);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (111,4,'friday',21);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (112,4,'saturday',22);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (113,4,'sunday',23);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (114,4,'monday',24);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (115,4,'tuesday',25);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (116,4,'wednesday',26);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (117,4,'thursday',27);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (118,4,'friday',28);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (119,4,'saturday',29);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (120,4,'sunday',30);
```

```sql
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (121,5,'monday',1);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (122,5,'tuesday',2);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (123,5,'wednesday',3);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (124,5,'thursday',4);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (125,5,'friday',5);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (126,5,'saturday',6);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (127,5,'sunday',7);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (128,5,'monday',8);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (129,5,'tuesday',9);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (130,5,'wednesday',10);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (131,5,'thursday',11);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (132,5,'friday',12);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (133,5,'saturday',13);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (134,5,'sunday',14);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (135,5,'monday',15);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (136,5,'tuesday',16);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (137,5,'wednesday',17);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (138,5,'thursday',18);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (139,5,'friday',19);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (140,5,'saturday',20);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (141,5,'sunday',21);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (142,5,'monday',22);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (143,5,'tuesday',23);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (144,5,'wednesday',24);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (145,5,'thursday',25);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (146,5,'friday',26);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (147,5,'saturday',27);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (148,5,'sunday',28);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (149,5,'monday',29);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (150,5,'tuesday',30);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (151,5,'wednesday',31);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (152,6,'thursday',1);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (153,6,'friday',2);
```

```sql
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (154,6,'saturday',3);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (155,6,'sunday',4);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (156,6,'monday',5);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (157,6,'tuesday',6);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (158,6,'wednesday',7);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (159,6,'thursday',8);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (160,6,'friday',9);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (161,6,'saturday',10);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (162,6,'sunday',11);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (163,6,'monday',12);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (164,6,'tuesday',13);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (165,6,'wednesday',14);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (166,6,'thursday',15);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (167,6,'friday',16);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (168,6,'saturday',17);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (169,6,'sunday',18);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (170,6,'monday',19);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (171,6,'tuesday',20);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (172,6,'wednesday',21);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (173,6,'thursday',22);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (174,6,'friday',23);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (175,6,'saturday',24);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (176,6,'sunday',25);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (177,6,'monday',26);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (178,6,'tuesday',27);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (179,6,'wednesday',28);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (180,6,'thursday',29);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (181,6,'friday',30);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (182,7,'saturday',1);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (183,7,'sunday',2);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (184,7,'monday',3);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (185,7,'tuesday',4);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (186,7,'wednesday',5);
```

```sql
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (187,7,'thursday',6);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (188,7,'friday',7);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (189,7,'saturday',8);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (190,7,'sunday',9);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (191,7,'monday',10);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (192,7,'tuesday',11);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (193,7,'wednesday',12);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (194,7,'thursday',13);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (195,7,'friday',14);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (196,7,'saturday',15);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (197,7,'sunday',16);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (198,7,'monday',17);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (199,7,'tuesday',18);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (200,7,'wednesday',19);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (201,7,'thursday',20);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (202,7,'friday',21);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (203,7,'saturday',22);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (204,7,'sunday',23);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (205,7,'monday',24);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (206,7,'tuesday',25);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (207,7,'wednesday',26);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (208,7,'thursday',27);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (209,7,'friday',28);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (210,7,'saturday',29);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (211,7,'sunday',30);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (212,7,'monday',31);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (213,8,'tuesday',1);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (214,8,'wednesday',2);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (215,8,'thursday',3);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (216,8,'friday',4);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (217,8,'saturday',5);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (218,8,'sunday',6);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (219,8,'monday',7);
```

```sql
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (220,8,'tuesday',8);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (221,8,'wednesday',9);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (222,8,'thursday',10);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (223,8,'friday',11);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (224,8,'saturday',12);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (225,8,'sunday',13);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (226,8,'monday',14);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (227,8,'tuesday',15);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (228,8,'wednesday',16);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (229,8,'thursday',17);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (230,8,'friday',18);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (231,8,'saturday',19);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (232,8,'sunday',20);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (233,8,'monday',21);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (234,8,'tuesday',22);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (235,8,'wednesday',23);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (236,8,'thursday',24);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (237,8,'friday',25);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (238,8,'saturday',26);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (239,8,'sunday',27);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (240,8,'monday',28);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (241,8,'tuesday',29);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (242,8,'wednesday',30);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (243,8,'thursday',31);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (244,9,'friday',1);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (245,9,'saturday',2);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (246,9,'sunday',3);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (247,9,'monday',4);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (248,9,'tuesday',5);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (249,9,'wednesday',6);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (250,9,'thursday',7);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (251,9,'friday',8);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (252,9,'saturday',9);
```

```sql
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (253,9,'sunday',10);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (254,9,'monday',11);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (255,9,'tuesday',12);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (256,9,'wednesday',13);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (257,9,'thursday',14);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (258,9,'friday',15);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (259,9,'saturday',16);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (260,9,'sunday',17);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (261,9,'monday',18);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (262,9,'tuesday',19);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (263,9,'wednesday',20);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (264,9,'thursday',21);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (265,9,'friday',22);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (266,9,'saturday',23);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (267,9,'sunday',24);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (268,9,'monday',25);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (269,9,'tuesday',26);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (270,9,'wednesday',27);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (271,9,'thursday',28);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (272,9,'friday',29);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (273,9,'saturday',30);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (274,10,'sunday',1);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (275,10,'monday',2);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (276,10,'tuesday',3);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (277,10,'wednesday',4);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (278,10,'thursday',5);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (279,10,'friday',6);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (280,10,'saturday',7);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (281,10,'sunday',8);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (282,10,'monday',9);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (283,10,'tuesday',10);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (284,10,'wednesday',11);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (285,10,'thursday',12);
```

```
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (286,10,'friday',13);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (287,10,'saturday',14);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (288,10,'sunday',15);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (289,10,'monday',16);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (290,10,'tuesday',17);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (291,10,'wednesday',18);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (292,10,'thursday',19);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (293,10,'friday',20);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (294,10,'saturday',21);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (295,10,'sunday',22);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (296,10,'monday',23);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (297,10,'tuesday',24);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (298,10,'wednesday',25);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (299,10,'thursday',26);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (300,10,'friday',27);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (301,10,'saturday',28);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (302,10,'sunday',29);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (303,10,'monday',30);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (304,10,'tuesday',31);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (305,11,'wednesday',1);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (306,11,'thursday',2);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (307,11,'friday',3);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (308,11,'saturday',4);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (309,11,'sunday',5);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (310,11,'monday',6);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (311,11,'tuesday',7);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (312,11,'wednesday',8);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (313,11,'thursday',9);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (314,11,'friday',10);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (315,11,'saturday',11);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (316,11,'sunday',12);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (317,11,'monday',13);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (318,11,'tuesday',14);
```

```sql
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (319,11,'wednesday',15);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (320,11,'thursday',16);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (321,11,'friday',17);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (322,11,'saturday',18);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (323,11,'sunday',19);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (324,11,'monday',20);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (325,11,'tuesday',21);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (326,11,'wednesday',22);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (327,11,'thursday',23);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (328,11,'friday',24);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (329,11,'saturday'25);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (330,11,'sunday',26);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (331,11,'monday',27);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (332,11,'tuesday',28);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (333,11,'wednesday',29);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (334,11,'thursday',30);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (335,12,'friday',1);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (336,12,'saturday',2);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (337,12,'sunday',3);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (338,12,'monday',4);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (339,12,'tuesday',5);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (340,12,'wednesday',6);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (341,12,'thursday',7);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (342,12,'friday',8);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (343,12,'saturday',9);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (344,12,'sunday',10);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (345,12,'monday',11);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (346,12,'tuesday',12);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (347,12,'wednesday',13);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (348,12,'thursday',14);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (349,12,'friday',15);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (350,12,'saturday',16);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (351,12,'sunday',17);
```

```sql
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (352,12,'monday',18);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (353,12,'tuesday',19);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (354,12,'wednesday',20);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (355,12,'thursday',21);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (356,12,'friday',22);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (357,12,'saturday',23);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (358,12,'sunday',24);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (359,12,'monday',25);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (360,12,'tuesday',26);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (361,12,'wednesday',27);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (362,12,'thursday',28);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (363,12,'friday',29);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (364,12,'saturday',30);
INSERT INTO olap_bookshop.day (day_id, month_id, day, num_day)VALUES (365,12,'sunday',31);


INSERT INTO olap_bookshop.warehouse (code, subregion_id) VALUES(1,1);
INSERT INTO olap_bookshop.warehouse (code, subregion_id) VALUES(2,1);
INSERT INTO olap_bookshop.warehouse (code, subregion_id) VALUES(3,2);
INSERT INTO olap_bookshop.warehouse (code, subregion_id) VALUES(4,2);
INSERT INTO olap_bookshop.warehouse (code, subregion_id) VALUES(5,3);
INSERT INTO olap_bookshop.warehouse (code, subregion_id) VALUES(6,3);
INSERT INTO olap_bookshop.warehouse (code, subregion_id) VALUES(7,4);
INSERT INTO olap_bookshop.warehouse (code, subregion_id) VALUES(8,4);
INSERT INTO olap_bookshop.warehouse (code, subregion_id) VALUES(9,5);
INSERT INTO olap_bookshop.warehouse (code, subregion_id) VALUES(10,5);
INSERT INTO olap_bookshop.warehouse (code, subregion_id) VALUES(11,6);
INSERT INTO olap_bookshop.warehouse (code, subregion_id) VALUES(12,6);
INSERT INTO olap_bookshop.warehouse (code, subregion_id) VALUES(13,7);
INSERT INTO olap_bookshop.warehouse (code, subregion_id) VALUES(14,7);
INSERT INTO olap_bookshop.warehouse (code, subregion_id) VALUES(15,8);
INSERT INTO olap_bookshop.warehouse (code, subregion_id) VALUES(16,8);
INSERT INTO olap_bookshop.warehouse (code, subregion_id) VALUES(17,9);
INSERT INTO olap_bookshop.warehouse (code, subregion_id) VALUES(18,9);
```

```sql
INSERT INTO olap_bookshop.warehouse (code, subregion_id) VALUES(19,10);
INSERT INTO olap_bookshop.warehouse (code, subregion_id) VALUES(20,10);


INSERT INTO olap_bookshop.books (isbn, title, price) VALUES(97062,'A Gentleman Never Keeps Score',384.00);
INSERT INTO olap_bookshop.books (isbn, title, price) VALUES(97283,'Texas Glory',94.50);
INSERT INTO olap_bookshop.books (isbn, title, price) VALUES(97028,'Rainy day friends',45.00);
INSERT INTO olap_bookshop.books (isbn, title, price) VALUES(97038,'Crazy Rich Asians',1234.50);
INSERT INTO olap_bookshop.books (isbn, title, price) VALUES(97939,'Tell me you are mine',23.60);
INSERT INTO olap_bookshop.books (isbn, title, price) VALUES(97294,'The spy and the traitor',200.00);
INSERT INTO olap_bookshop.books (isbn, title, price) VALUES(97037,'Paradaise Sky by Jose Lansdale',145.00);
INSERT INTO olap_bookshop.books (isbn, title, price) VALUES(97394,'Meet Camaro from the Nigh Charter',165.99);
INSERT INTO olap_bookshop.books (isbn, title, price) VALUES(97060,'Book 9 for A Gentleman',344.00);
INSERT INTO olap_bookshop.books (isbn, title, price) VALUES(97283,'Book 10 for Texas',84.50);
INSERT INTO olap_bookshop.books (isbn, title, price) VALUES(97028,'Book 11 for Rainy day',75.00);
INSERT INTO olap_bookshop.books (isbn, title, price) VALUES(97038,'Book 12 for Crazy Rich Asians',124.50);
INSERT INTO olap_bookshop.books (isbn, title, price) VALUES(97939,'Book 13 for you',23.60);
INSERT INTO olap_bookshop.books (isbn, title, price) VALUES(97294,'Book 14 for the spy and the traitor',240.00);
INSERT INTO olap_bookshop.books (isbn, title, price) VALUES(97939,'Book 15 for the Sky ',135.00);
INSERT INTO olap_bookshop.books (isbn, title, price) VALUES(97394,'Book 16 for the Nigh Charter',125.99);
INSERT INTO olap_bookshop.books (isbn, title, price) VALUES(97062,'Book 17 Keeps Score',314.00);
INSERT INTO olap_bookshop.books (isbn, title, price) VALUES(97283,'Book 18 Glory',84.50);
INSERT INTO olap_bookshop.books (isbn, title, price) VALUES(97028,'Book 19 day friends',65.00);
INSERT INTO olap_bookshop.books (isbn, title, price) VALUES(97038,'Book 20 Asians',1434.50);
INSERT INTO olap_bookshop.books (isbn, title, price) VALUES(97038,'Book 21 for the Bible',1434.50);


INSERT INTO olap_bookshop.facts_ticket (day_id, warehouse_code,books_isbn, sell_by_product, ticket_number) VALUES
(52,14,9703859312,275,1);
INSERT INTO olap_bookshop.facts_ticket (day_id, warehouse_code,books_isbn, sell_by_product, ticket_number) VALUES
(345,10,9703746207,48,1);
INSERT INTO olap_bookshop.facts_ticket (day_id, warehouse_code,books_isbn, sell_by_product, ticket_number) VALUES
(314,7,9739482716,15,1);
INSERT INTO olap_bookshop.facts_ticket (day_id, warehouse_code,books_isbn, sell_by_product, ticket_number) VALUES
(50,17,9703746215,56,1);
```

INSERT INTO olap_bookshop.facts_ticket (day_id, warehouse_code,books_isbn, sell_by_product, ticket_number) VALUES (6,37,9793937405,270,1);

INSERT INTO olap_bookshop.facts_ticket (day_id, warehouse_code,books_isbn, sell_by_product, ticket_number) VALUES (358,31,9703746207,96,2);

INSERT INTO olap_bookshop.facts_ticket (day_id, warehouse_code,books_isbn, sell_by_product, ticket_number) VALUES (223,8,9703746215,84,2);

INSERT INTO olap_bookshop.facts_ticket (day_id, warehouse_code,books_isbn, sell_by_product, ticket_number) VALUES (91,23,9703746207,16,2);

INSERT INTO olap_bookshop.facts_ticket (day_id, warehouse_code,books_isbn, sell_by_product, ticket_number) VALUES (142,24,9793937413,166,3);

INSERT INTO olap_bookshop.facts_ticket (day_id, warehouse_code,books_isbn, sell_by_product, ticket_number) VALUES (123,25,9706279301,180,3);

INSERT INTO olap_bookshop.facts_ticket (day_id, warehouse_code,books_isbn, sell_by_product, ticket_number) VALUES (339,23,9793937413,14,3);

INSERT INTO olap_bookshop.facts_ticket (day_id, warehouse_code,books_isbn, sell_by_product, ticket_number) VALUES (35,29,9702833319,287,3);

INSERT INTO olap_bookshop.facts_ticket (day_id, warehouse_code,books_isbn, sell_by_product, ticket_number) VALUES (167,22,9728304802,56,3);

INSERT INTO olap_bookshop.facts_ticket (day_id, warehouse_code,books_isbn, sell_by_product, ticket_number) VALUES (64,13,9706279301,90,4);

INSERT INTO olap_bookshop.facts_ticket (day_id, warehouse_code,books_isbn, sell_by_product, ticket_number) VALUES (219,18,9793937413,581,4);

INSERT INTO olap_bookshop.facts_ticket (day_id, warehouse_code,books_isbn, sell_by_product, ticket_number) VALUES (129,14,9729473014,637,6);

INSERT INTO olap_bookshop.facts_ticket (day_id, warehouse_code,books_isbn, sell_by_product, ticket_number) VALUES (60,16,9729473006,74,6);

INSERT INTO olap_bookshop.facts_ticket (day_id, warehouse_code,books_isbn, sell_by_product, ticket_number) VALUES (7,12,9706279301,210,7);

INSERT INTO olap_bookshop.facts_ticket (day_id, warehouse_code,books_isbn, sell_by_product, ticket_number) VALUES (329,24,9728304810,84,7);

INSERT INTO olap_bookshop.facts_ticket (day_id, warehouse_code,books_isbn, sell_by_product, ticket_number) VALUES (344,38,9793937405,225,7);

INSERT INTO olap_bookshop.facts_ticket (day_id, warehouse_code,books_isbn, sell_by_product, ticket_number) VALUES

(328,10,9739482716,105,7);

INSERT INTO olap_bookshop.facts_ticket (day_id, warehouse_code,books_isbn, sell_by_product, ticket_number) VALUES (239,32,9703859304,840,8);

INSERT INTO olap_bookshop.facts_ticket (day_id, warehouse_code,books_isbn, sell_by_product, ticket_number) VALUES (66,6,9793937405,225,8);

INSERT INTO olap_bookshop.facts_ticket (day_id, warehouse_code,books_isbn, sell_by_product, ticket_number) VALUES (44,30,9729473006,222,8);

INSERT INTO olap_bookshop.facts_ticket (day_id, warehouse_code,books_isbn, sell_by_product, ticket_number) VALUES (355,10,9703859320,198,9);

INSERT INTO olap_bookshop.facts_ticket (day_id, warehouse_code,books_isbn, sell_by_product, ticket_number) VALUES (54,13,9702833319,246,9);

INSERT INTO olap_bookshop.facts_ticket (day_id, warehouse_code,books_isbn, sell_by_product, ticket_number) VALUES (296,37,9703859304,240,10);

INSERT INTO olap_bookshop.facts_ticket (day_id, warehouse_code,books_isbn, sell_by_product, ticket_number) VALUES (49,18,9703859321,27,10);

INSERT INTO olap_bookshop.facts_ticket (day_id, warehouse_code,books_isbn, sell_by_product, ticket_number) VALUES (233,6,9729473014,364,11);

INSERT INTO olap_bookshop.facts_ticket (day_id, warehouse_code,books_isbn, sell_by_product, ticket_number) VALUES (88,5,9728304818,35,11);

INSERT INTO olap_bookshop.facts_ticket (day_id, warehouse_code,books_isbn, sell_by_product, ticket_number) VALUES (95,36,9728304810,72,11);

INSERT INTO olap_bookshop.facts_ticket (day_id, warehouse_code,books_isbn, sell_by_product, ticket_number) VALUES (341,21,9703746207,112,11);

INSERT INTO olap_bookshop.facts_ticket (day_id, warehouse_code,books_isbn, sell_by_product, ticket_number) VALUES (217,11,9706279301,30,11);

INSERT INTO olap_bookshop.facts_ticket (day_id, warehouse_code,books_isbn, sell_by_product, ticket_number) VALUES (80,27,9706279317,42,13);
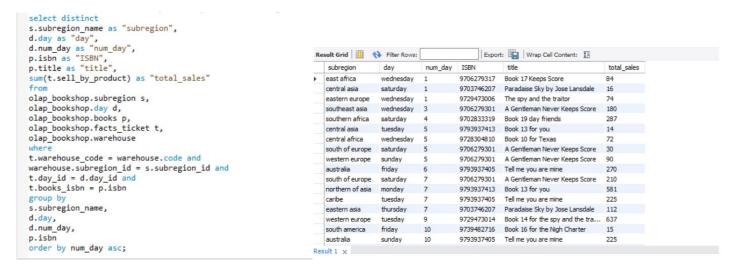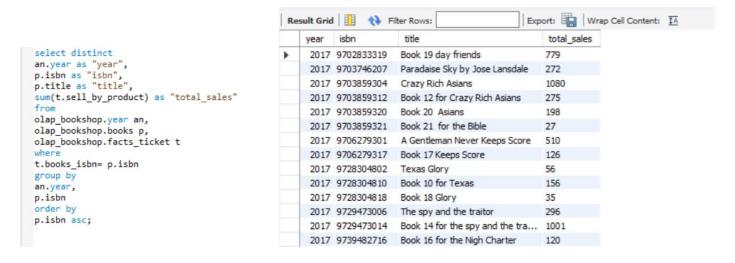
INSERT INTO olap_bookshop.facts_ticket (day_id, warehouse_code,books_isbn, sell_by_product, ticket_number) VALUES (206,28,9702833319,246,13);

INSERT INTO olap_bookshop.facts_ticket (day_id, warehouse_code,books_isbn, sell_by_product, ticket_number) VALUES (305,34,9706279317,84,13);

1.- Obtain the total daily sales by book and subregion SUBREGION, DAY, ISBN, TITLE, TOTAL_SALES
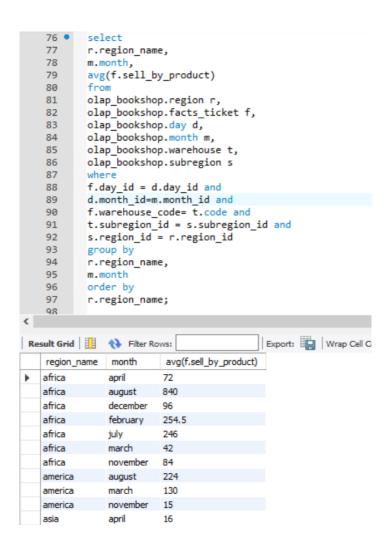
```sql
select distinct
s.subregion_name as "subregion",
d.day as "day",
d.num_day as "num_day",
p.isbn as "ISBN",
p.title as "title",
sum(t.sell_by_product) as "total_sales"
from
olap_bookshop.subregion s,
olap_bookshop.day d,
olap_bookshop.books p,
olap_bookshop.facts_ticket t,
olap_bookshop.warehouse
where
t.warehouse_code = warehouse.code and
warehouse.subregion_id = s.subregion_id and
t.day_id = d.day_id and
t.books_isbn = p.isbn
group by
s.subregion_name,
d.day,
d.num_day,
p.isbn
order by num_day asc;
```

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	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
australia	sunday	10	9793937405	Tell me you are mine	225

Result 1 ×

2.- Obtain annual sales per book YEAR, ISBN, TITLE, SALES_AMOUNT

```sql
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	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

3.- Obtain which region had the most transactions during October 2017 REGIONNAME, NO_TRANSACTIONS (ONE SINGLE RENGLON, THE MAXIMUM)

```sql
with ventas_month as (
            select
                r.region_name,
                count(f.ticket_number) as count
            from
                olap_bookshop.region r,
                olap_bookshop.facts_ticket f,
                olap_bookshop.day d,
                olap_bookshop.month m,
                olap_bookshop.warehouse t,
                olap_bookshop.subregion s
            where
                m.month = 'october' and
                f.day_id = d.day_id and
                d.month_id=m.month_id and
                f.warehouse_code = t.code and
                t.subregion_id = s.subregion_id and
                s.region_id = r.region_id
            group by r.region_name)
select region_name, max(count)
from
ventas_month
group by region_name;
```

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

region_name	max(count)
oceania	1

4.- Obtain the average of the sale per ticket (invoice) per month in each region REGIONAME, MONTH, AVG_INVOICE

```
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 C

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

5.- Get which books are bought together more frequently by OLAP (SQL) a) SQL (DESCRIPTIVE ANALYTICS) ISBN1, ISBN1 ISBN1, ISBN2 ISBN1, ISBN4 ISBN2, ISBN1 ISBN2, ISBN4

```
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
```

esult 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