Department of Computer Science and Software Engineering COMP 353 Summer 2020

Warmup Project

Presented by:

group account: vxc353_1

Mohamed Hefny 40033382 Aloys Portafaix 40030443 Caren Rizk 40031705 Robert Beaudenon 260725065

To: Dr Khaled Jababo

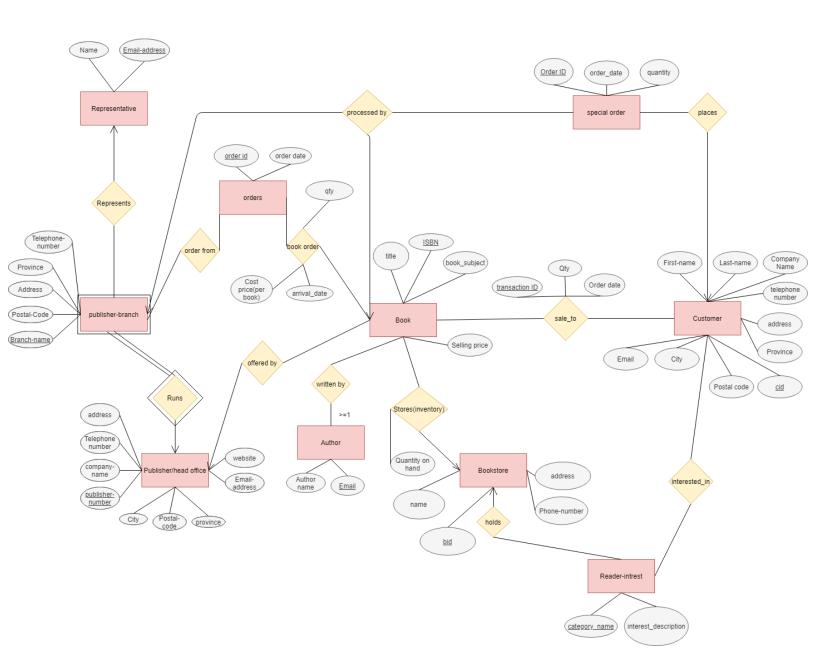
Part 1.

Notes about E/R:

- The publisher details are the head office details.
- Can a customer order the same book on the same day? Yes, if he already bought the same book earlier during the day, you would just increment the "qty" attribute to increase the quantity ordered.
- Year to date quantity sold can be retrieved by a query instead of having an attribute for it. For example: select ISBN, count(*) from sale where order_date between x and y group by ISBN
- Amount of cumulative purchases can be retrieved by a query not necessary an attribute

E/R diagram





Part 2.

/*Note: for better readability a sql file 'creatingtables.sql' is attached*/

```
- Host: 127.0.0.1 Database: comp353a1
-- Server version 10.1.37-MariaDB
/*!40101 SET @OLD_CHARACTER_SET_CLIENT=@@CHARACTER_SET_CLIENT */;
/*!40101 SET @OLD CHARACTER SET RESULTS=@@CHARACTER SET RESULTS */;
/*!40101 SET @OLD_COLLATION_CONNECTION=@@COLLATION_CONNECTION */;
/*!40101 SET NAMES utf8 */;
/*!40103 SET @OLD_TIME_ZONE=@@TIME_ZONE */;
/*!40103 SET TIME_ZONE='+00:00' */;
/*!40014 SET @OLD UNIQUE CHECKS=@@UNIQUE CHECKS, UNIQUE CHECKS=0 */;
/*!40014 SET @OLD_FOREIGN_KEY_CHECKS=@@FOREIGN_KEY_CHECKS, FOREIGN_KEY_CHECKS=0 *
/*!40101 SET @OLD SQL MODE=@@SQL MODE, SQL MODE='NO AUTO VALUE ON ZERO' */;
/*!40111 SET @OLD_SQL_NOTES=@@SQL_NOTES, SQL_NOTES=0 */;
-- Table structure for table `author`
DROP TABLE IF EXISTS `author`;
/*!40101 SET @saved_cs_client = @@character_set_client */;
/*!40101 SET character_set client = utf8 */;
CREATE TABLE `author` (
 `email` varchar(50) NOT NULL,
 `author name` varchar(50) DEFAULT NULL,
 PRIMARY KEY (`email`)
) ENGINE=InnoDB DEFAULT CHARSET=latin1;
/*!40101 SET character_set_client = @saved_cs_client */;
-- Table structure for table `bookstore`
DROP TABLE IF EXISTS `bookstore`;
/*!40101 SET @saved_cs_client = @@character_set_client */;
/*!40101 SET character set client = utf8 */;
```

```
CREATE TABLE `bookstore` (
  `bs id` varchar(10) NOT NULL,
  `phone_number` varchar(50) DEFAULT NULL,
 `address` varchar(50) DEFAULT NULL,
 `bookstore_name` varchar(50) DEFAULT NULL,
 PRIMARY KEY (`bs id`)
) ENGINE=InnoDB DEFAULT CHARSET=latin1;
/*!40101 SET character_set_client = @saved_cs_client */;
-- Table structure for table `book`
DROP TABLE IF EXISTS `book`;
/*!40101 SET @saved_cs_client = @@character_set_client */;
/*!40101 SET character_set_client = utf8 */;
CREATE TABLE `book` (
 `ISBN` varchar(50) NOT NULL,
  `publisher_number` varchar(10) NOT NULL,
 `title` varchar(50) DEFAULT NULL,
 `book_subject` varchar(50) DEFAULT NULL,
  `Selling price` varchar(50) DEFAULT NULL,
 PRIMARY KEY ('ISBN'),
 KEY `publisher_number` (`publisher_number`),
 CONSTRAINT `book_ibfk_1` FOREIGN KEY (`publisher_number`) REFERENCES `publisher
 (`publisher number`)
) ENGINE=InnoDB DEFAULT CHARSET=latin1;
/*!40101 SET character set client = @saved cs client */;
DROP TABLE IF EXISTS `book order`;
/*!40101 SET @saved_cs_client = @@character_set_client */;
/*!40101 SET character_set_client = utf8 */;
CREATE TABLE `book_order` (
  `order_id` varchar(10) NOT NULL,
 `ISBN` varchar(50) NOT NULL,
 `qty` int,
  `arrival_date` date,
 `cost_price` int DEFAULT null,
 PRIMARY KEY (`order id`, `ISBN`),
```

```
KEY 'ISBN' ('ISBN'),
 CONSTRAINT `book order ibfk 1` FOREIGN KEY (`order id`) REFERENCES `orders` (`o
rder id`),
 CONSTRAINT `book order ibfk 2` FOREIGN KEY (`ISBN`) REFERENCES `book` (`ISBN`)
) ENGINE=InnoDB DEFAULT CHARSET=latin1;
/*!40101 SET character set client = @saved cs client */;
-- Table structure for table `customer`
DROP TABLE IF EXISTS `customer`;
/*!40101 SET @saved cs client
                               = @@character set client */;
/*!40101 SET character_set_client = utf8 */;
CREATE TABLE `customer` (
  `cid` varchar(10),
  `first name` varchar(50) DEFAULT NULL,
 `last name` varchar(50) DEFAULT NULL,
 `company_name` varchar(50) DEFAULT NULL,
  `telephone number` varchar(50) DEFAULT NULL,
 `address` varchar(50) DEFAULT NULL,
  `province` varchar(50) DEFAULT NULL,
  `postal code` varchar(50) DEFAULT NULL,
 `city` varchar(50) DEFAULT NULL,
 `email` varchar(50) DEFAULT NULL,
 PRIMARY KEY (`cid`)
) ENGINE=InnoDB DEFAULT CHARSET=latin1;
/*!40101 SET character set client = @saved cs client */;
-- Table structure for table `interested in`
DROP TABLE IF EXISTS `interested_in`;
/*!40101 SET @saved cs client = @@character set client */;
/*!40101 SET character set client = utf8 */;
CREATE TABLE `interested_in` (
  `category name` varchar(50) NOT NULL,
 `cid` varchar(10) NOT NULL,
 PRIMARY KEY (`category_name`,`cid`),
 KEY `cid` (`cid`),
 CONSTRAINT `interested_in_ibfk_1` FOREIGN KEY (`category_name`) REFERENCES `rea
der interest` (`category name`),
```

```
CONSTRAINT `interested_in_ibfk_2` FOREIGN KEY (`cid`) REFERENCES `customer`
id`)
) ENGINE=InnoDB DEFAULT CHARSET=latin1;
/*!40101 SET character set client = @saved cs client */;
-- Table structure for table `order from`
DROP TABLE IF EXISTS `order from`;
/*!40101 SET @saved cs client
                                = @@character set client */;
/*!40101 SET character set client = utf8 */;
CREATE TABLE `order_from` (
  `branch name` varchar(50) NOT NULL,
  `publisher_number` varchar(10) NOT NULL,
 `order id` varchar(10) NOT NULL,
 PRIMARY KEY (`branch_name`,`publisher_number`,`order_id`),
 KEY `order_id` (`order_id`),
 CONSTRAINT `order_from_ibfk_1` FOREIGN KEY (`branch_name`, `publisher_number`)
REFERENCES `publisher_branch` (`branch_name`, `publisher_number`),
 CONSTRAINT `order_from_ibfk_2` FOREIGN KEY (`order_id`) REFERENCES `orders` (`o
rder id`)
) ENGINE=InnoDB DEFAULT CHARSET=latin1;
/*!40101 SET character set client = @saved cs client */;
-- Table structure for table `orders`
DROP TABLE IF EXISTS `orders`;
/*!40101 SET @saved cs client = @@character set client */;
/*!40101 SET character set client = utf8 */;
CREATE TABLE `orders` (
  `order id` varchar(10) NOT NULL,
 `order_date` date DEFAULT NULL,
 PRIMARY KEY (`order id`)
) ENGINE=InnoDB DEFAULT CHARSET=latin1;
/*!40101 SET character_set_client = @saved_cs_client */;
 - Table structure for table `publisher`
DROP TABLE IF EXISTS `publisher`;
```

```
/*!40101 SET @saved cs client = @@character set client */;
/*!40101 SET character set client = utf8 */;
CREATE TABLE `publisher` (
  `publisher number` varchar(10) NOT NULL,
  `address` varchar(300) DEFAULT NULL,
  `telephone number` varchar(50) DEFAULT NULL,
  `company name` varchar(50) DEFAULT NULL,
  `city` varchar(50) DEFAULT NULL,
  `postal code` varchar(50) DEFAULT NULL,
  `province` varchar(50) DEFAULT NULL,
  `email address` varchar(50) DEFAULT NULL,
  `website` varchar(50) DEFAULT NULL,
 PRIMARY KEY (`publisher_number`),
 KEY `email address` (`email address`),
 CONSTRAINT `publisher_ibfk_1` FOREIGN KEY (`email_address`) REFERENCES `represe
ntative` (`email address`)
) ENGINE=InnoDB DEFAULT CHARSET=latin1;
/*!40101 SET character set client = @saved cs client */;
-- Table structure for table `publisher branch`
DROP TABLE IF EXISTS `publisher branch`;
/*!40101 SET @saved_cs_client = @@character_set_client */;
/*!40101 SET character set client = utf8 */;
CREATE TABLE `publisher branch` (
  `branch_name` varchar(50) NOT NULL,
  `publisher number` varchar(10) NOT NULL,
 `telephone_number` varchar(50) DEFAULT NULL,
  `rep email address` varchar(50) DEFAULT NULL,
  `province` varchar(50) DEFAULT NULL,
 `address` varchar(50) DEFAULT NULL,
  `postal code` varchar(50) DEFAULT NULL,
  PRIMARY KEY (`branch_name`, publisher_number`),
 KEY `publisher number` (`publisher number`),
 KEY `rep_email_address` (`rep_email_address`),
 CONSTRAINT `publisher_branch_ibfk_1` FOREIGN KEY (`publisher_number`) REFERENCE
S `publisher` (`publisher_number`),
 CONSTRAINT `publisher_branch_ibfk_2` FOREIGN KEY (`rep_email_address`) REFERENC
ES `representative` (`email address`)
) ENGINE=InnoDB DEFAULT CHARSET=latin1;
/*!40101 SET character set client = @saved cs client */;
```

```
- Table structure for table `reader interest`
DROP TABLE IF EXISTS `reader interest`;
/*!40101 SET @saved_cs_client = @@character_set_client */;
/*!40101 SET character set client = utf8 */;
CREATE TABLE `reader interest` (
  `category_name` varchar(50) NOT NULL,
  `interest description` varchar(200) DEFAULT NULL,
 `bs_id` varchar(10) NOT NULL,
 PRIMARY KEY (`category_name`),
 KEY `bs id` (`bs id`),
 CONSTRAINT `reader_interest_ibfk_1` FOREIGN KEY (`bs_id`) REFERENCES `bookstore
 (`bs id`)
) ENGINE=InnoDB DEFAULT CHARSET=latin1;
/*!40101 SET character set client = @saved cs client */;
-- Table structure for table `representative`
DROP TABLE IF EXISTS `representative`;
/*!40101 SET @saved cs client
                                = @@character set client */;
/*!40101 SET character_set_client = utf8 */;
CREATE TABLE `representative` (
  `email address` varchar(50) NOT NULL,
 `representative name` varchar(50) DEFAULT NULL,
 PRIMARY KEY (`email_address`)
) ENGINE=InnoDB DEFAULT CHARSET=latin1;
/*!40101 SET character set client = @saved cs client */;
-- Table structure for table `sale to`
DROP TABLE IF EXISTS `sale to`;
/*!40101 SET @saved_cs_client = @@character_set_client */;
/*!40101 SET character set client = utf8 */;
CREATE TABLE `sale to` (
  `ISBN` varchar(50) NOT NULL,
  `cid` varchar(10) NOT NULL ,
 `Transaction_id` varchar(10) NOT NULL,
 `Quantity` int(11) DEFAULT NULL,
 `Order_date` date DEFAULT NULL,
 PRIMARY KEY (`ISBN`, `cid`, `Transaction id`),
```

```
KEY `cid` (`cid`),
 CONSTRAINT `sale_to_ibfk_1` FOREIGN KEY (`ISBN`), REFERENCES `book` (`ISBN`),
 CONSTRAINT `sale_to_ibfk_2` FOREIGN KEY (`cid`) REFERENCES `customer` (`cid`)
) ENGINE=InnoDB DEFAULT CHARSET=latin1;
/*!40101 SET character_set_client = @saved_cs_client */;
-- Table structure for table `special_order`
DROP TABLE IF EXISTS `special order`;
/*!40101 SET @saved_cs_client = @@character_set_client */;
/*!40101 SET character_set_client = utf8 */;
CREATE TABLE `special order` (
  `order id` varchar(10) NOT NULL,
 `order date` date DEFAULT NULL,
  `Quantity` int(11) DEFAULT NULL,
  `cid` varchar(10) NOT NULL,
 `branch name` varchar(50) NOT NULL,
  `publisher_number` varchar(10) NOT NULL,
  `ISBN` varchar(50) NOT NULL,
 PRIMARY KEY (`order_id`),
 CONSTRAINT `special order ibfk 1` FOREIGN KEY (`cid`) REFERENCES `customer` (`c
id`),
 CONSTRAINT `special_order_ibfk_2` FOREIGN KEY (`branch_name`,`publisher_number`
) REFERENCES `publisher_branch`(`branch_name`,`publisher_number`),
 CONSTRAINT `special_order_ibfk_3` FOREIGN KEY (`ISBN`) REFERENCES `book`(`ISBN`
) ENGINE=InnoDB DEFAULT CHARSET=latin1;
/*!40101 SET character set client = @saved cs client */;
-- Table structure for table `stores`
DROP TABLE IF EXISTS `stores`;
/*!40101 SET @saved_cs_client = @@character_set_client */;
/*!40101 SET character_set_client = utf8 */;
CREATE TABLE `stores` (
  `ISBN` varchar(50) NOT NULL,
  `bs id` varchar(10) NOT NULL,
 `Quantity_on_hand` int(11) DEFAULT NULL,
 PRIMARY KEY (`ISBN`,`bs_id`),
 KEY `bs id` (`bs id`),
```

```
CONSTRAINT `stores_ibfk_1` FOREIGN KEY (`bs_id`) REFERENCES `bookstore` (`bs_id
),
 CONSTRAINT `stores_ibfk_2` FOREIGN KEY (`ISBN`) REFERENCES `book` (`ISBN`)
) ENGINE=InnoDB DEFAULT CHARSET=latin1;
/*!40101 SET character_set_client = @saved_cs_client */;
DROP TABLE IF EXISTS `written by`;
/*!40101 SET @saved cs client = @@character set client */;
/*!40101 SET character_set_client = utf8 */;
CREATE TABLE `written by` (
  `ISBN` varchar(50) NOT NULL,
 `email` varchar(50) NOT NULL,
 PRIMARY KEY (`ISBN`, `email`),
 KEY `email` (`email`),
 CONSTRAINT `written by ibfk 1` FOREIGN KEY (`ISBN`) REFERENCES `book` (`ISBN`),
 CONSTRAINT `written_by_ibfk_2` FOREIGN KEY (`email`) REFERENCES `author` (`emai
1`)
) ENGINE=InnoDB DEFAULT CHARSET=latin1;
/*!40101 SET character set client = @saved cs client */;
/*!40103 SET TIME ZONE=@OLD TIME ZONE */;
/*!40101 SET SQL MODE=@OLD SQL MODE */;
/*!40014 SET FOREIGN KEY CHECKS=@OLD FOREIGN_KEY_CHECKS */;
/*!40014 SET UNIQUE_CHECKS=@OLD_UNIQUE_CHECKS */;
/*!40101 SET CHARACTER SET CLIENT=@OLD CHARACTER SET CLIENT */;
/*!40101 SET CHARACTER SET RESULTS=@OLD CHARACTER SET RESULTS */;
/*!40101 SET COLLATION_CONNECTION=@OLD_COLLATION_CONNECTION */;
/*!40111 SET SQL NOTES=@OLD SQL NOTES */;
-- Dump completed on 2020-07-15 3:03:47
```

Part 2.

/*Note: for better readability a sql file 'queries.sql' is attached*/

```
/*i. Get details of all books in stock ordered by year-to-date-qty-
sold in descending order.*/
select b.isbn,a.author_name,b.title,b.book_subject,b.selling_price,s.quantity_on_
hand, detail.quantity_sold
from book b, written_by wb, author a, stores s,
(select st.isbn, count(*) as quantity_sold
from sale to st
group by isbn) detail
where b.isbn=detail.isbn and b.isbn=wb.isbn and wb.email=a.email and b.isbn = s.i
sbn
order by quantity sold desc;
/*ii. Get details of all back orders for a given publisher.*/
select bo.order_id, o.order_date, bo.isbn,bo.qty,off.branch_name
from orders o, order_from off, book_order bo
where o.order_id = bo.order_id and bo.order_id = off.order_id and bo.arrival_dat
e is null and publisher_number = "p1";
/*iii. For a given customer, get details of all his/her special orders.*/
select c.first_name,so.order_id,so.order_date,so.quantity,so.ISBN,so.branch_name,
so.publisher_number
from customer c, special order so
where c.cid=so.cid and c.cid='c1';
/*iv. For a given customer, get details of all his/her purchases made during a
specific period of time from a given branch.*/
select c.cid, c.first_name, st.transaction_id, st.quantity, st.order_date, b.titl
e, b.isbn, b.selling_price, b.book_subject
from customer c, sale_to st, book b
where c.cid = st.cid and st.isbn = b.isbn and st.order_date between '2020-02-
02' and '2020-09-09' and c.cid='c1';
/*v. Give a report of sales during a specific period of time for a given branch.*
select bo.isbn as book_sold, sum(bo.qty) as quantity_sold, sum(bo.cost_price*bo.q
ty) as total_sales
from order_from off, book_order bo, orders o
where off.order_id = bo.order_id and off.branch_name='b1' and off.order_id= o.ord
er_id
    and o.order date >= DATE("2019-01-01")
    and o.order_date <= DATE("2020-07-01")</pre>
group by bo.isbn;
```

```
/*vi. Find the title and name of publisher of book(s) that have the highest backo
rder.*/
select off.publisher number,p.company name,back order.isbn,b.title, max(quantity)
as back order quantity
from order from off, publisher p, book b,
(select bo.isbn,bo.order id, sum(bo.qty) as quantity
from book order bo
where arrival date is null
group by bo.isbn) as back order
where off.order id=back order.order id and off.publisher number=p.publisher numbe
r and back_order.isbn = b.isbn;
/*vii. Give details of books that are supplied by a given publisher ordered by
their sale price in increasing order.*/
select b.title, b.isbn, b.selling price, b.book subject, a.author name, b.selling
price
from book b, author a, written by wb
where b.publisher number="p3" and b.isbn = wb.isbn and wb.email = a.email
order by b.selling price;
/*viii. For all publishers who have at least three branches, get details of the h
office and all the branches for those publishers.*/
select pub2.publisher_number, pub2.head_address, pub2.head_number, pub2.head_comp
any name, pub2.head city, pub2.head postal, pub2.head province, pub2.head email,
pub2.head website,
b.branch name,b.postal code,b.address,b.province,b.telephone number
from publisher branch b,
(select pub.publisher_number,p.address as head_address, p.telephone_number as hea
d number, p.company name as head company name, p.city as head city, p.postal code
 as head_postal, p.province as head_province, p.email_address as head_email,p.web
site as head website
from publisher p,
(select pb.publisher number, count(*) as branch number
from publisher branch pb
group by pb.publisher number
having branch number >=3) as pub
where p.publisher_number = pub.publisher_number) as pub2
where pub2.publisher number=b.publisher number;
/*ix. Get details of books that are in the inventory for at least one year but th
ere
have never been a purchase for that specific book.*/
```

```
select bo.isbn, b.title, b.selling_price,b.book_subject,s.quantity_on_hand,a.auth
or_name
from book_order bo, stores s, book b, written_by wb, author a
where bo.isbn not in(select st.isbn
from sale_to st
where st.order_date between '2019-07-17' and '2020-07-17')
and bo.isbn=s.isbn and bo.arrival_date < '2019-07-
17' and bo.isbn = b.isbn and b.isbn=wb.isbn and wb.email=a.email;

/*x. Get details of all books that are in the inventory for a given author.*/
select b.title, b.isbn, b.selling_price, b.book_subject, s.quantity_on_hand, a.au
thor_name
from book b, author a,written_by bi, stores s
where b.isbn=bi.isbn and bi.email = a.email and bi.isbn = s.isbn and a.email="pke
nnally8@engadget.com";</pre>
```

Part 3. /*Note: for better readability, a sql file 'tuples.sql' is attached*/

```
SET FOREIGN_KEY_CHECKS=1;
/*author*/
insert into author (author name, email) values ('Row Havill', 'kedmonstone0@rambl
er.ru');
insert into author (author name, email) values ('Upton Southerton', 'rbickerdike1
@aol.com');
insert into author (author_name, email) values ('Nadine Rubinfajn', 'ebruyns2@lin
kedin.com');
insert into author (author_name, email) values ('Germain Byrd', 'gflacknell3@t-
online.de');
insert into author (author_name, email) values ('Kirby Micka', 'emaple4@geocities
.jp');
insert into author (author_name, email) values ('Kennan Dunkerton', 'wbale5@de.vu
');
insert into author (author_name, email) values ('Feliks Casperri', 'agoldson6@mar
insert into author (author_name, email) values ('Hamnet Ebbins', 'nnovak7@berkele
y.edu');
insert into author (author_name, email) values ('Junia Gillow', 'pkennally8@engad
get.com');
insert into author (author_name, email) values ('Jacqueline Duer', 'jismail9@fda.
gov');
```

```
/*bookstore*/
insert into bookstore (bs id, phone number, address, bookstore name) values ('bs1
 , '170-792-1904', '24806 Golden Leaf Parkway', 'betterbook');
insert into customer (cid, first name, last name, company name, telephone number,
 address, province, postal code, city, email) values ("c1", 'Priscilla', 'todor',
null, '294-600-
9853', '95940 Aberg Alley', 'quebec', 'H3H2C3', 'Starobin', 'ptodor0@sciencedirec
t.com');
insert into customer (cid, first_name, last_name, company_name, telephone_number,
 address, province, postal_code, city, email) values ("c2", 'Corrina', 'Embury',
null, '278-466-
7843', '3 Kensington Point', 'quebec', 'H3G2C3', 'Montbéliard', 'cembury1@nature.
com');
insert into customer (cid, first_name, last_name, company_name, telephone_number,
address, province, postal_code, city, email) values ("c3", 'Aguistin', 'Wessel',
null, '249-511-
5222', '91 Lake View Park', 'ontario', 'G3G2C3', 'Halden', 'awessel2@java.com');
insert into customer (cid, first_name, last_name, company_name, telephone_number,
address, province, postal_code, city, email) values ("c4", 'Stephana', 'Cavil',
null, '614-553-
4903', '90913 Mesta Court', 'quebec', 'G3U2C3', 'Ondoy', 'scavil3@360.cn');
insert into customer (cid, first name, last name, company name, telephone number,
address, province, postal_code, city, email) values ("c5", 'Rouvin', 'Weeke', nu
11, '720-405-
0928', '4102 Karstens Center', 'ontario', 'G3P2C3', 'Przeworsk', 'rweeke4@nyu.edu
');
insert into customer (cid, first name, last name, company name, telephone number,
address, province, postal_code, city, email) values ("c6", 'Annabal', 'Ducket',
null, '240-322-
1222', '492 Shasta Center', 'ontario', 'G3G4C3', 'Kousséri', 'aducket5@dyndns.org
');
insert into customer (cid, first name, last name, company name, telephone number,
address, province, postal_code, city, email) values ("c7", 'Fifi', 'Aspey', null
 '571-821-
0822', '9 Tennessee Way', 'quebec', 'G3G1C3', 'Eldama Ravine', 'faspey6@gmpg.org'
);
insert into customer (cid, first_name, last_name, company_name, telephone_number,
address, province, postal_code, city, email) values ("c8", 'Trenna', 'Lammerding
', null, '333-468-
4652', '7857 Forest Run Circle', 'ontario', 'H3G2C3', 'Watulimo', 'tlammerding7@b
izjournals.com');
insert into customer (cid, first_name, last_name, company_name, telephone_number,
address, province, postal_code, city, email) values ("c9", 'Hew', 'Cochrane',
```

```
ubblebox', '314-942-
0200', '10 Clarendon Crossing', 'ontario', 'C3G2C3', 'Masjid', 'hcochrane8@imgur.
com');
insert into customer (cid, first name, last name, company name, telephone number,
address, province, postal_code, city, email) values ("c10", 'Rob', 'Sailes', nul
1, '255-310-
8617', '81727 Loomis Road', 'quebec', 'G3E2C3', 'Xiongzhang', 'rsailes9@topsy.com
/*orders*/
insert into orders (order id, order date) values ('o1', '2019-11-07');
insert into orders (order id, order date) values ('o2', '2020-06-10');
insert into orders (order_id, order_date) values ('o3', '2020-06-05');
insert into orders (order id, order date) values ('o4', '2020-01-08');
insert into orders (order_id, order_date) values ('o5', '2020-05-05');
insert into orders (order_id, order_date) values ('o6', '2019-10-15');
insert into orders (order id, order date) values ('o7', '2019-12-01');
insert into orders (order_id, order_date) values ('08', '2020-06-05');
insert into orders (order_id, order_date) values ('09', '2020-03-04');
insert into orders (order_id, order_date) values ('o10', '2020-07-10');
insert into orders (order_id, order_date) values ('o11', '2019-09-21');
insert into orders (order id, order date) values ('o12', '2019-08-20');
insert into orders (order_id, order_date) values ('o13', '2019-06-10');
insert into orders (order_id, order_date) values ('o14', '2019-04-12');
insert into orders (order_id, order_date) values ('o15', '2019-02-15');
insert into orders (order id, order date) values ('o16', '2019-05-17');
insert into orders (order id, order date) values ('o17', '2019-06-19');
/*reader interest*/
insert into reader_interest(category_name, bs_id, interest_description) values ("
fantasy", "bs1", "Fantasy is a genre of speculative fiction set in a fictional un
iverse, often inspired by real world myth and folklore.");
insert into reader_interest(category_name, bs_id, interest_description) values ("
adventure", "bs1", "Adventure fiction is a genre of fiction in which an adventure
, an exciting undertaking involving risk and physical danger, forms the main stor
yline.");
insert into reader_interest(category_name, bs_id, interest_description) values ("
romance", "bs1", "A romance novel or romantic novel is a type of novel and genre
fiction which places its primary focus on the relationship and romantic love betw
een two people");
insert into reader interest(category name, bs id, interest description) values ("
mystery", "bs1", "Mystery fiction is a genre of fiction usually involving a myste
rious death or a crime to be solved.");
```

```
insert into reader_interest(category_name, bs_id, interest_description) values ("
horror", "bs1", "Horror is a genre of speculative fiction which is intended to fr
ighten, scare, disgust, or startle its readers by inducing feelings of horror and
insert into reader_interest(category_name, bs_id, interest_description) values ("
thriller", "bs1", "Thrillers are characterized and defined by the moods they elic
it, giving viewers heightened feelings of suspense, excitement, surprise, anticip
ation and anxiety.");
insert into reader_interest(category_name, bs_id, interest_description) values ("
travel", "bs1", "Books in the travel nonfiction genre are about places and destin
ations one might want to visit during their travels.");
insert into reader interest(category name, bs id, interest description) values ("
health", "bs1", "Books in the health nonfiction genre are about the health and fu
nction of the human body.");
insert into reader_interest(category_name, bs_id, interest_description) values ("
motivational", "bs1", "Books in the inspirational fiction genre contain stories o
f people who overcome adversity or reach new levels of understanding that inspire
and encourage the reader to do the same.");
insert into reader interest(category name, bs id, interest description) values ("
guide/how to", "bs1", "Books in this category explain how to get specific things
done in an efficient and correct way.");
/*representative*/
insert into representative (email address, representative name) values ('mhise@@m
su.edu','mohamed');
insert into representative (email_address, representative_name) values ( 'lsteels
1@spotify.com','amr');
insert into representative (email_address, representative_name) values ( 'ccopest
ake2@walmart.com','yas');
insert into representative (email_address, representative_name) values ( 'scurley
3@kickstarter.com', 'roby');
insert into representative (email_address, representative_name) values ('dsylvain
e4@csmonitor.com','john');
insert into representative (email address, representative name) values ( 'aormrod
5@friendfeed.com','cat');
insert into representative (email_address, representative_name) values ( 'pwhyatt
6@plala.or.jp','sara');
insert into representative (email_address, representative_name) values ( 'athrift
7@deviantart.com','jas');
insert into representative (email_address, representative_name) values ('astennet
t8@phpbb.com','yas');
insert into representative (email_address, representative_name) values ('rbirdis9
@weather.com','bob');
insert into representative (email_address, representative_name) values ('gmuir@@e
-recht24.de','bobby');
```

```
insert into representative (email_address, representative_name) values ( 'mgreens
ides1@sohu.com','hefny' );
insert into representative (email_address, representative_name) values ( 'apiolli
2@oakley.com','carle');
insert into representative (email_address, representative_name) values ( 'mrunnet
t3@e-recht24.de','carly');
insert into representative (email address, representative name) values ('vedbrook
e4@nps.gov','noha');
insert into representative (email address, representative name) values ( 'dpinnoc
ke5@nhs.uk', 'tara');
insert into representative (email address, representative name) values ('msimmge
n6@google.com','bortol');
insert into representative (email_address, representative_name) values ( 'fkinley
side7@friendfeed.com','mohanad');
insert into representative (email_address, representative_name) values ('rmcmurty
r8@naver.com','jasmine');
insert into representative (email_address, representative_name) values ('tabade9@
reverbnation.com','yasmine');
/*publisher*/
insert into publisher (publisher number, address, telephone number, company name,
 city, postal_code, province, email_address, website) values ('p1', '71 Menomonie
 Circle', '405-470-
3544', 'Dabfeed', 'Oklahoma City', '73135', 'Oklahoma', 'gmuir@e-
recht24.de', 'www.biqao.com');
insert into publisher (publisher number, address, telephone number, company name,
 city, postal_code, province, email_address, website) values ('p2', '6 Park Meado
w Circle', '212-666-
7532', 'Tanoodle', 'New York City', '10090', 'New York', 'mgreensides1@sohu.com',
 'www.alofl.com');
insert into publisher (publisher_number, address, telephone_number, company_name,
 city, postal_code, province, email_address, website) values ('p3', '2 Lien Park'
 '309-295-
5825', 'Vinder', 'Carol Stream', '60158', 'Illinois', 'apiolli2@oakley.com', 'www
.pbfkm.com');
insert into publisher (publisher number, address, telephone number, company name,
 city, postal_code, province, email_address, website) values ('p4', '35506 Clove
Way', '478-359-5219', 'Yadel', 'Macon', '31210', 'Georgia', 'mrunnett3@e-
recht24.de', 'www.zhsic.com');
insert into publisher (publisher_number, address, telephone_number, company_name,
 city, postal_code, province, email_address, website) values ('p5', '22 Fuller Po
int', '404-151-
1774', 'Rhycero', 'Atlanta', '31132', 'Georgia', 'vedbrooke4@nps.gov', 'www.cfytu
.com');
```

```
insert into publisher (publisher_number, address, telephone_number, company_name,
 city, postal_code, province, email_address, website) values ('p6', '79 Di Loreto
 Terrace', '816-412-
9068', 'Eayo', 'Kansas City', '64109', 'Missouri', 'dpinnocke5@nhs.uk', 'www.uviy
a.com');
insert into publisher (publisher number, address, telephone number, company name,
 city, postal code, province, email address, website) values ('p7', '49 Waubesa A
lley', '505-326-
2708', 'Yodoo', 'Albuquerque', '87105', 'New Mexico', 'msimmgen6@google.com', 'ww
w.ibpby.com');
insert into publisher (publisher_number, address, telephone_number, company_name,
 city, postal_code, province, email_address, website) values ('p8', '1574 Roxbury
Road', '515-425-
8942', 'Camimbo', 'Des Moines', '50305', 'Iowa', 'fkinleyside7@friendfeed.com', '
www.orvra.com');
insert into publisher (publisher_number, address, telephone_number, company_name,
 city, postal_code, province, email_address, website) values ('p9', '270 Jay Terr
ace', '414-848-
8492', 'Dynabox', 'Milwaukee', '53263', 'Wisconsin', 'rmcmurtyr8@naver.com', 'www
.kwuox.com');
insert into publisher (publisher_number, address, telephone_number, company_name,
city, postal_code, province, email_address, website) values ('p10', '71073 Mccor
mick Road', '619-795-
7469', 'Livetube', 'San Diego', '92186', 'California', 'tabade9@reverbnation.com'
 'www.xrnkq.com');
/*publisher branch*/
insert into publisher_branch (branch_name, publisher_number, telephone_number, re
p email address, province, address, postal code) values ('b1','p1', '819-277-
8936', 'mhise0@msu.edu', 'Garoua Boulaï', '58 Westerfield Court', 'c7S6b1');
insert into publisher branch (branch name, publisher number, telephone number, re
p_email_address, province, address, postal_code) values ('b2','p1', '329-585-
5963', 'lsteels1@spotify.com', 'Itaqui', '6637 Clove Trail', 'F601j2');
insert into publisher branch (branch name, publisher number, telephone number, re
p_email_address, province, address, postal_code) values ('b3','p1', '626-379-
7430', 'ccopestake2@walmart.com', 'Siedlce', '010 Esker Road', 'V5r8W3');
insert into publisher_branch (branch_name, publisher_number, telephone_number, re
p_email_address, province, address, postal_code) values ('b4','p4', '254-589-
3862', 'scurley3@kickstarter.com', 'Malaruhatan', '1 Northfield Court', 'J0w7v9')
insert into publisher branch (branch name, publisher number, telephone number, re
p_email_address, province, address, postal_code) values ('b5','p5', '737-842-
3513', 'dsylvaine4@csmonitor.com', 'Kibonsod', '8 Eliot Hill', 'S3q9Q5');
insert into publisher_branch (branch_name, publisher_number, telephone_number, re
p email address, province, address, postal code) values ('b6','p6', '194-757-
```

```
9650', 'aormrod5@friendfeed.com', 'São Brás de Alportel', '281 Bartillon Avenue',
 'f4t8n8');
insert into publisher branch (branch name, publisher number, telephone number, re
p email address, province, address, postal code) values ('b7','p7', '838-885-
9802', 'pwhyatt6@plala.or.jp', 'Praia da Vagueira', '2 Logan Court', 'K7V9F8');
insert into publisher_branch (branch_name, publisher_number, telephone_number, re
p email address, province, address, postal code) values ('b8','p8', '322-435-
4367', 'athrift7@deviantart.com', 'Noginsk', '3 Dunning Junction', 'W5j9L3');
insert into publisher branch (branch name, publisher number, telephone number, re
p_email_address, province, address, postal_code) values ('b9','p9', '307-331-
2906', 'astennett8@phpbb.com', 'Idi Iroko', '46911 Anhalt Circle', 'N5c1M4');
insert into publisher branch (branch name, publisher number, telephone number, re
p_email_address, province, address, postal_code) values ('b10','p10', '611-720-
7818', 'rbirdis9@weather.com', 'Bryukhovetskaya', '39138 Atwood Street', 'y8d0z1'
);
/*order from*/
insert into `order from` (branch name,publisher number,order id) values ('b1', 'p
1', 'o1');
insert into `order from` (branch name,publisher number,order id) values ('b2', 'p
1', 'o2');
insert into `order from` (branch name, publisher number, order id) values ('b3', 'p
1', 'o3');
insert into `order from` (branch name, publisher number, order id) values ('b4', 'p
4', 'o4');
insert into `order from` (branch name,publisher number,order id) values ('b5', 'p
5', 'o5');
insert into `order from` (branch name,publisher number,order id) values ('b6', 'p
6', '06');
insert into `order from` (branch name,publisher number,order id) values ('b7', 'p
7', 'o7');
insert into `order from` (branch name,publisher number,order id) values ('b8', 'p
8', '08');
insert into `order from` (branch name, publisher number, order id) values ('b9', 'p
insert into `order from` (branch name, publisher number, order id) values ('b10', '
p10', 'o10');
/*book*/
insert into book (ISBN, publisher number, title, book subject, selling price ) va
lues ('958599307-4', 'p1', 'Better Than Sex', 'Diomedea irrorata', 78);
insert into book (ISBN, publisher_number, title, book_subject, selling_price ) va
lues ('173127435-1', 'p2', 'Master of Disguise, The', 'Geochelone elegans', 76);
insert into book (ISBN, publisher_number, title, book_subject, selling_price ) va
lues ('240258028-
```

```
3', 'p3', 'Old Man Made in Spain (Abuelo made in Spain)', 'Laniarius ferrugineus'
, 52);
insert into book (ISBN, publisher_number, title, book_subject, selling_price ) va
lues ('346111992-X', 'p4', 'Dark City', 'Psittacula krameri', 57);
insert into book (ISBN, publisher_number, title, book_subject, selling_price ) va
lues ('549652903-4', 'p5', 'To the Limit (Am Limit)', 'Varanus salvator', 82);
insert into book (ISBN, publisher_number, title, book_subject, selling_price ) va
lues ('326314786-2', 'p6', 'Spy in Black, The', 'Geochelone elephantopus', 39);
insert into book (ISBN, publisher number, title, book subject, selling price ) va
lues ('698507015-9', 'p7', 'Last Time I Saw Archie, The', 'Gyps fulvus', 52);
insert into book (ISBN, publisher_number, title, book_subject, selling_price ) va
lues ('266608745-X', 'p8', 'Maze, The', 'Castor canadensis', 78);
insert into book (ISBN, publisher_number, title, book_subject, selling_price ) va
lues ('272521287-
1', 'p9', 'A Story of Children and Film', 'Anas bahamensis', 44);
insert into book (ISBN, publisher_number, title, book_subject, selling_price ) va
lues ('205217918-6', 'p10', 'Last Stand, The', 'Mirounga leonina', 89);
insert into book (ISBN, publisher_number, title, book_subject, selling_price ) va
lues ('205242918-6', 'p3', 'Mr. Bean', 'Funny', 89);
insert into book (ISBN, publisher_number, title, book_subject, selling_price) val
ues ('321821287-1', 'p3', 'Mr. white man', 'Funny', 89);
insert into `book order` (order id,ISBN,qty,arrival date,cost price) values ('o1'
 '958599307-4', 308, '2019-11-09',10);
insert into `book_order` (order_id,ISBN,qty,arrival_date,cost_price) values ('o2'
 '958599307-4', 476, null,20);
insert into `book_order` (order_id,ISBN,qty,arrival_date,cost_price) values ('o3'
 '346111992-X', 323, null,30);
insert into `book_order` (order_id,ISBN,qty,arrival_date,cost_price) values ('o4'
 '346111992-X', 137, '2020-01-11',22);
insert into `book_order` (order_id,ISBN,qty,arrival_date,cost_price) values ('o5'
 '205217918-6', 343, '2020-05-09',34);
insert into `book order` (order id,ISBN,qty,arrival date,cost price) values ('o6'
 '205217918-6', 123, null,32);
insert into `book_order` (order_id,ISBN,qty,arrival_date,cost_price) values ('o7'
 '698507015-9', 107, '2019-12-01',44);
insert into `book_order` (order_id,ISBN,qty,arrival_date,cost_price) values ('o8'
 '698507015-9', 465, null,44);
insert into `book_order` (order_id,ISBN,qty,arrival_date,cost_price) values ('o9'
 '272521287-1', 128, '2020-03-04',55);
insert into `book_order` (order_id,ISBN,qty,arrival_date,cost_price) values ('o10
 , '272521287-1', 223, null,66);
insert into `book_order` (order_id,ISBN,qty,arrival_date,cost_price) values ('o11
 , '173127435-1', 61, '2019-01-19',77);
```

```
insert into `book_order` (order_id,ISBN,qty,arrival_date,cost_price) values ('o12
', '240258028-3', 61, '2019-01-10',32);
insert into `book_order` (order_id,ISBN,qty,arrival_date,cost_price) values ('o13
', '549652903-4', 36, '2019-01-09',42);
insert into `book_order` (order_id,ISBN,qty,arrival_date,cost_price) values ('o14
', '326314786-2', 69, '2019-01-19',12);
insert into `book order` (order id, ISBN, qty, arrival date, cost price) values ('o15
', '266608745-X', 41, '2019-01-25',34);
insert into `book_order` (order_id,ISBN,qty,arrival_date,cost_price) values ('o17
', '321821287-1', 123, '2019-03-04',23);
insert into sale_to (ISBN, cid, transaction_id, quantity, order_date) values ('95
8599307-4', 'c1', 't1', 94, '2020-06-05');
insert into sale_to (ISBN, cid, transaction_id, quantity, order_date) values ('27
2521287-1', 'c2', 't2', 56, '2020-05-04');
insert into sale_to (ISBN, cid, transaction_id, quantity, order_date) values ('34
6111992-X', 'c3', 't3', 55, '2020-05-08');
insert into sale_to (ISBN, cid, transaction_id, quantity, order_date) values ('20
5217918-6', 'c4', 't4', 31, '2020-01-02');
insert into sale_to (ISBN, cid, transaction_id, quantity, order_date) values ('95
8599307-4', 'c5', 't5', 38, '2020-06-07');
insert into sale_to (ISBN, cid, transaction_id, quantity, order_date) values ('95
8599307-4', 'c6', 't6', 16, '2020-01-03');
insert into sale_to (ISBN, cid, transaction_id, quantity, order_date) values ('20
5217918-6', 'c7', 't7', 3, '2020-01-05');
insert into sale_to (ISBN, cid, transaction_id, quantity, order_date) values ('95
8599307-4', 'c8', 't8', 61, '2020-02-08');
insert into sale to (ISBN, cid, transaction id, quantity, order date) values ('69
8507015-9', 'c9', 't9', 86, '2020-01-09');
insert into sale_to (ISBN, cid, transaction_id, quantity, order_date) values ('20
5217918-6', 'c10', 't10', 24, '2020-01-08');
/*special order*/
insert into special_order (order_id, order_date, Quantity, cid, branch_name, publ
isher_number, ISBN) values ('so1', '2020-4-3', 5, 'c1','b1','p1','958599307-4');
insert into special_order (order_id, order_date, Quantity, cid, branch_name, publ
isher_number, ISBN) values ('so2', '2020-2-4', 2, 'c4', 'b2', 'p1', '173127435-1');
insert into special_order (order_id, order_date, Quantity, cid, branch_name, publ
isher_number, ISBN) values ('so3', '2020-1-3', 3, 'c3','b3','p1','240258028-3');
insert into special_order (order_id, order_date, Quantity, cid, branch_name, publ
isher_number, ISBN) values ('so4', '2020-5-3', 2, 'c2','b4','p4','346111992-X');
insert into special_order (order_id, order_date, Quantity, cid, branch_name, publ
isher_number, ISBN) values ('so5', '2020-6-3', 3, 'c7','b5','p5','549652903-4');
```

```
insert into special_order (order_id, order_date, Quantity, cid, branch_name, publ
isher_number, ISBN) values ('so6', '2020-7-3', 5, 'c6','b6','p6','326314786-2');
insert into special_order (order_id, order_date, Quantity, cid, branch_name, publ
isher_number, ISBN) values ('so7', '2020-8-3', 2, 'c5', 'b7', 'p7', '698507015-9');
insert into special_order (order_id, order_date, Quantity, cid, branch_name, publ
isher_number, ISBN) values ('so8', '2020-9-3', 4, 'c8', 'b8', 'p8', '266608745-X');
insert into special_order (order_id, order_date, Quantity, cid, branch_name, publ
isher_number, ISBN) values ('so9', '2020-10-3', 3, 'c9','b9','p9','272521287-1');
insert into special order (order id, order date, Quantity, cid, branch name, publ
isher_number, ISBN) values ('so10', '2020-4-1', 4, 'c10','b10','p10','205217918-
6');
/*store*/
insert into stores (isbn, quantity on hand, bs id) values ('958599307-
4', 99, 'bs1');
insert into stores (isbn, quantity on hand, bs id) values ('173127435-
1', 61, 'bs1');
insert into stores (isbn, quantity_on_hand, bs_id) values ('240258028-
3', 61, 'bs1');
insert into stores (isbn, quantity_on_hand, bs_id) values ('346111992-
X', 82, 'bs1');
insert into stores (isbn, quantity_on_hand, bs_id) values ('549652903-
4', 36, 'bs1');
insert into stores (isbn, quantity on hand, bs id) values ('326314786-
2', 69, 'bs1');
insert into stores (isbn, quantity on hand, bs id) values ('698507015-
9', 21, 'bs1');
insert into stores (isbn, quantity_on_hand, bs_id) values ('266608745-
X', 41, 'bs1');
insert into stores (isbn, quantity_on_hand, bs_id) values ('272521287-
1', 72, 'bs1');
insert into stores (isbn, quantity_on_hand, bs_id) values ('205217918-
6', 27, 'bs1');
insert into stores (isbn, quantity on hand, bs id) values ('205242918-
insert into stores (isbn, quantity_on_hand, bs_id) values ('321821287-
1', 123, 'bs1');
/*written_by*/
insert into written by (ISBN, email) values ('958599307-
4', 'kedmonstone0@rambler.ru');
insert into written by (ISBN, email) values ('173127435-
1', 'rbickerdike1@aol.com');
insert into written_by (ISBN, email) values ('240258028-
3', 'ebruyns2@linkedin.com');
```

```
insert into written by (ISBN, email) values ('346111992-X', 'gflacknell3@t-
online.de');
insert into written_by (ISBN, email) values ('549652903-
4', 'emaple4@geocities.jp');
insert into written_by (ISBN, email) values ('326314786-2', 'wbale5@de.vu');
insert into written_by (ISBN, email) values ('698507015-
9', 'agoldson6@marriott.com');
insert into written_by (ISBN, email) values ('266608745-
X', 'nnovak7@berkeley.edu');
insert into written_by (ISBN, email) values ('272521287-
1', 'pkennally8@engadget.com');
insert into written_by (ISBN, email) values ('205217918-6', 'jismail9@fda.gov');
insert into written_by (ISBN, email) values ('205242918-6', 'gflacknell3@t-
online.de');
insert into written_by (ISBN, email) values ('321821287-1', 'wbale5@de.vu');
/*interested in*/
insert into interested_in (cid, category_name) values ("c1", "fantasy");
insert into interested_in (cid, category_name) values ("c2", "adventure");
insert into interested_in (cid, category_name) values ("c3", "mystery");
insert into interested_in (cid, category_name) values ("c4", "horror");
insert into interested_in (cid, category_name) values ("c5", "thriller");
insert into interested_in (cid, category_name) values ("c6", "travel");
insert into interested_in (cid, category_name) values ("c7", "health");
insert into interested_in (cid, category_name) values ("c8", "motivational");
insert into interested_in (cid, category_name) values ("c9", "guide/how to");
insert into interested_in (cid, category_name) values ("c10", "adventure");
```

Part 4.

SELECT COUNT(*) FROM author;

	COUNT(*)
•	10

SELECT COUNT(*) FROM bookstore;

	COUNT(*)
•	1

Note: it is only one because the professor has informed us to consider only one bookstore

SELECT COUNT(*) FROM book;

	COUNT(*)
•	12

SELECT COUNT(*) FROM book_order;

	COUNT(*)
•	16

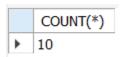
SELECT COUNT(*) FROM customer;

	COUNT(*)
>	10

SELECT COUNT(*) FROM interested_in;

	COUNT(*)
•	10

SELECT COUNT(*) FROM order_from;



SELECT COUNT(*) FROM orders;

	COUNT(*)
•	17

SELECT COUNT(*) FROM publisher;

	COUNT(*)
•	10

SELECT COUNT(*) FROM publisher_branch;

	COUNT(*)
•	10

SELECT COUNT(*) FROM reader_interest;

	COUNT(*)
Þ	10

SELECT COUNT(*) FROM representative;

	COUNT(*)
•	20

SELECT COUNT(*) FROM sale_to;

	COUNT(*)
•	10

SELECT COUNT(*) FROM special_order;

	COUNT(*)
•	10

SELECT COUNT(*) FROM stores;

	COUNT(*)
•	12

SELECT COUNT(*) FROM written_by;

	COUNT(*)
•	12