1. Write a query that displays the book title, cost and year of publication for every book in the system.

SQL: **SELECT BOOK_TITLE, BOOK_COST, BOOK_YEAR**
FROM dbo.BOOK;

2. Write a query that displays the first and last name of every patron.

PAT_FNAME	PAT_LNAME
robert	carter
Kelsey	Koch
Cedric	Baldwin
Vera	Alvarado
Alan	Martin
Cory	Barry
Peggy	Marsh
Tony	Miles
Betsy	Malone

SQL: **SELECT PAT_FNAME, PAT_LNAME**
      FROM dbo.PATRON;

3. Write a query to display the checkout number, checkout date, and due date for every book that has been checked out.

CHECK_NUM	CHECK_OUT_DATE	CHECK_DUE_DATE
91001	3/31/2015	4/14/2015
91002	3/31/2015	4/7/2015
91003	3/31/2015	4/14/2015
91004	3/31/2015	4/14/2015
91005	3/31/2015	4/7/2015
91006	4/5/2015	4/12/2015
91007	4/5/2015	4/12/2015
91008	4/5/2015	4/12/2015
91009	4/5/2015	4/19/2015
91010	4/5/2015	4/19/2015
91011	4/5/2015	4/12/2015

SQL: **SELECT CHECK_NUM, CHECK_OUT_DATE, CHECK_DUE_DATE**
      FROM dbo.CHECKOUT

4. Write a query to display the book number, book title, and year of publication for every book.

BOOK_NUM	TITLE	Year Published
5235	Beginner's Guide to JAVA	2012
5236	Database in the Cloud	2012
5237	Mastering the database environment	2013
5238	Conceptual Programming	2013
5239	J++ in Mobile Apps	2013
5240	iOS Programming	2013
5241	JAVA First Steps	2013
5242	C# in Middleware Deployment	2013
5243	DATABASES in Theory	2013
5244	Cloud-based Mobile Applications	2013

SQL: **SELECT BOOK_NUM, BOOK_TITLE, BOOK_YEAR**
      FROM dbo.BOOK

5. Write a query to display the different years in which books have been published. Include each year only once.

BOOK_YEAR
2012
2013
2014
2015

SQL: **SELECT DISTINCT BOOK_YEAR**
FROM dbo.BOOK

6. Write a query to display the different subjects on which FACT has books. Include each subject only once.

BOOK_SUBJECT
Cloud
Database
Middleware
Programming

SQL: **SELECT DISTINCT BOOK_SUBJECT**
FROM dbo.BOOK;

7. Write a query to display the book number, title, and cost of each book.

BOOK_NUM	BOOK_TITLE	Replacement Cost
5235	Beginner's Guide to JAVA	59.95
5236	Database in the Cloud	79.95
5237	Mastering the database environment	89.95
5238	Conceptual Programming	59.95
5239	J++ in Mobile Apps	49.95
5240	iOS Programming	79.95
5241	JAVA First Steps	49.95
5242	C# in Middleware Deployment	59.95
5243	DATABASES in Theory	129.95
5244	Cloud-based Mobile Applications	69.95
5245	The Golden Road to Platform independence	119.95
5246	Capture the Cloud	69.95
5247	Shining Through the Cloud: Sun Programming	109.95
5248	What You Always Wanted to Know About Database, But Were Afraid to Ask	49.95

SQL: **SELECT BOOK_NUM, BOOK_TITLE, BOOK_COST**
FROM dbo.BOOK;

8. Write a query to display the checkout number, book number, patron ID, checkout date, and due date for every checkout that has ever occurred in the system. Sort the results by checkout date in descending order.

CHECK_NUM	BOOK_NUM	PAT_ID	CHECK_OUT_DATE	CHECK_DUE_DATE
91067	5252	1229	5/24/2015	5/31/2015
91068	5238	1229	5/24/2015	5/31/2015
91066	5242	1228	5/19/2015	5/26/2015
91065	5244	1210	5/17/2015	5/24/2015
91064	5236	1183	5/17/2015	5/31/2015
91060	5235	1209	5/15/2015	5/22/2015
91063	5243	1223	5/15/2015	5/22/2015
91062	5254	1223	5/15/2015	5/22/2015
91061	5246	1172	5/15/2015	5/22/2015
91056	5254	1224	5/10/2015	5/17/2015

SQL: **SELECT CHECK_NUM, BOOK_NUM, PAT_ID, CHECK_OUT_DATE, CHECK_DUE_DATE**
FROM dbo.CHECKOUT
ORDER BY CHECK_OUT_DATE desc;

9. Write a query to display the book title, year, and subject for every book. Sort the results by book subject in ascending order, year in descending order, and then title in ascending order.

BOOK_TITLE	BOOK_YEAR	BOOK_SUBJECT
Capture the Cloud	2014	Cloud
Starlight Applications	2014	Cloud
Cloud-based Mobile Applications	2013	Cloud
Database in the Cloud	2012	Cloud
Beyond the Database Veil	2014	Database
What You Always Wanted to Know About Database, But Were Afraid to Ask	2014	Database
DATABASES in Theory	2013	Database
Mastering the database environment	2013	Database
Reengineering the Middle Tier	2014	Middleware

SQL: **SELECT BOOK_TITLE, BOOK_YEAR, BOOK_SUBJECT**
FROM dbo.BOOK
ORDER BY BOOK_SUBJECT DESC, BOOK_YEAR DESC, BOOK_TITLE;

10. Write a query to display the book number, title, and year of publication for all books published in 2012.

BOOK_NUM	BOOK_TITLE	BOOK_YEAR
5235	Beginner's Guide to JAVA	2012
5236	Database in the Cloud	2012

SQL: **SELECT BOOK_NUM, BOOK_TITLE, BOOK_YEAR**
FROM dbo.BOOK
WHERE BOOK_YEAR = 2012 ;

11. Write a query to display the book number, title, and year of publication for all books in the "Database" subject.

BOOK_NUM	BOOK_TITLE	BOOK_YEAR
5237	Mastering the database environment	2013
5243	DATABASES in Theory	2013
5248	What You Always Wanted to Know About Database, But Were Afraid to Ask	2014
5252	Beyond the Database Veil	2014

SQL: **SELECT BOOK_NUM, BOOK_TITLE, BOOK_YEAR**
FROM dbo.BOOK
WHERE BOOK_SUBJECT = 'Database';

12. Write a query to display the checkout number, book number, and checkout date of all books checked out before April 5, 2015.

CHECK_NUM	BOOK_NUM	CHECK_OUT_DATE
91001	5235	3/31/2015
91002	5238	3/31/2015
91003	5240	3/31/2015
91004	5237	3/31/2015
91005	5236	3/31/2015

SQL: **SELECT CHECK_NUM, BOOK_NUM, CHECK_OUT_DATE**
FROM dbo.CHECKOUT
WHERE CHECK_OUT_DATE < '4/5/2015';

13. Write a query to display the book number, title, and year of publication of all books published after 2013 and on the "Programming" subject.

BOOK_NUM	BOOK_TITLE	BOOK_YEAR
5247	Shining Through the Cloud: Sun Programming	2014
5251	Thoughts on Revitalizing Ruby	2014
5253	Virtual Programming for Virtual Environments	2014
5254	Coding Style for Maintenance	2015

SQL: **SELECT BOOK_NUM, BOOK_TITLE, BOOK_YEAR**
FROM dbo.BOOK
WHERE BOOK_SUBJECT = 'Programming' AND BOOK_YEAR > 2013;

14. Write a query to display the book number, title, year of publication, subject, and cost for all books that are on the subjects of "Middleware" or "Cloud," and that cost more than $70.

BOOK_NUM	BOOK_TITLE	BOOK_YEAR	BOOK_SUBJECT	BOOK_COST
5236	Database in the Cloud	2012	Cloud	79.95
5245	The Golden Road to Platform independence	2014	Middleware	119.95
5250	Reengineering the Middle Tier	2014	Middleware	89.95

SQL: **SELECT BOOK_NUM, BOOK_TITLE, BOOK_YEAR, BOOK_SUBJECT, BOOK_COST**

FROM dbo.BOOK
WHERE (BOOK_SUBJECT = 'Middleware' OR BOOK_SUBJECT = 'Cloud')
AND BOOK_COST > 70;

15. Write a query to display the author ID, first name, last name, and year of birth for all authors born in the decade of the 1980s.

AU_ID	AU_FNAME	AU_LNAME	AU_BIRTHYEAR
218	Rachel	Beatney	1983
383	Neal	Walsh	1980
394	Robert	Lake	1982
438	Perry	Pearson	1986
460	Connie	Paulsen	1983
581	Manish	Aggerwal	1984
603	Julia	Palca	1988

SQL: **SELECT AU_ID, AU_FNAME, AU_LNAME, AU_BIRTHYEAR**
FROM dbo.AUTHOR
WHERE AU_BIRTHYEAR >= 1980 AND AU_BIRTHYEAR <= 1989;