BASIC SQL QUERIES

```
USE sqldemo;

DROP TABLE books;

CREATE TABLE books(bookid int, bookname varchar(20), author varchar(20), price int, publisher varchar(20));

INSERT INTO books VALUES (1,'C','Balu',100,'BPB'), (2,'C++','Gowri',200,'McGraw'),(3,'Java','Mano',300,'BPB'),(4,'Perl','James',400,'BPB'),(5,'Ruby','Antony',500,'McGraw');


-- 1

SELECT * FROM books;
```

bookid	bookname	author	price	publisher
1	C	Balu	100	BPB
2	C++	Gowri	200	McGraw
3	Java	Mano	300	BPB
4	Perl	James	400	BPB
5	Ruby	Antony	500	McGraw

```
-- 2

SELECT bookname FROM books;
```

bookname
C
C++
Java
Perl
Ruby

```
-- 3

SELECT count(*) FROM books;
```

count(*)
5

-- 4

SELECT author FROM books WHERE bookname = 'C++';

author
Gowri

-- 5

SELECT bookname FROM books WHERE price>200;

bookname
Java
Perl
Ruby

-- 6

SELECT bookname FROM books WHERE price BETWEEN 200 AND 400;

bookname
C++
Java
Perl

-- 7

SELECT bookname FROM books WHERE author = 'Antony';

bookname
Ruby

-- 8

SELECT bookname, price FROM books WHERE price=(SELECT max(price) FROM books);

bookname	price
Ruby	500

-- 9

SELECT bookname, price FROM books WHERE price=(SELECT min(price) FROM books);

bookname	price
C	100

-- 10

SELECT count(bookid),publisher FROM books GROUP BY publisher;

count(bookid)	publisher
3	BPB
2	McGraw

-- 11

SELECT avg(price) FROM books GROUP BY publisher HAVING publisher = 'McGraw';

avg(price)
350.0000

-- 12

SELECT * FROM books LIMIT 2;

bookid	bookname	author	price	publisher
1	C	Balu	100	BPB
2	C++	Gowri	200	McGraw

-- 13

SELECT * FROM books LIMIT 3,2;

bookid	bookname	author	price	publisher
4	Perl	James	400	BPB
5	Ruby	Antony	500	McGraw

SUBQUERIES

```
USE sqldemo;

DROP TABLE employee;

DROP TABLE dept;

CREATE TABLE employee(empid int, empname varchar(20),deptid int, salary int);

CREATE TABLE dept(deptid int, deptname varchar(20));

INSERT INTO employee
VALUES(1,'john',101,1000),(2,'mano',102,2000),(3,'prakash',101,3000),(4,'venu',102,4500
),(5,'abirami',101,5000);

INSERT INTO dept VALUES (101,'hr'),(102,'testing'),(103,'development'),(104,'accounts');


-- 1

SELECT empname FROM employee WHERE deptid = (SELECT deptid FROM dept
WHERE deptname = 'testing');
```

empname
mano
venu

```
-- 2

SELECT count(empid) FROM employee WHERE deptid = (SELECT deptid FROM dept
WHERE deptname = 'accounts');
```

count(empid)
0

```
-- 3

SELECT deptname FROM dept WHERE deptid = (SELECT deptid FROM employee
WHERE empname = 'john');
```

deptname
hr

```
-- 4
```

SELECT deptname FROM dept WHERE deptid = (SELECT deptid FROM employee WHERE salary = (SELECT max(salary) FROM employee));

deptname
hr

-- 5

SELECT deptname FROM dept WHERE deptid = (SELECT deptid FROM employee WHERE salary = (SELECT min(salary) FROM employee));

deptname
hr

-- 6

SELECT deptname FROM dept WHERE deptid = (SELECT deptid FROM employee GROUP BY deptid ORDER BY count(empid) DESC LIMIT 1);

deptname
hr

-- 7

SELECT deptname FROM dept WHERE deptid NOT IN (SELECT deptid FROM employee);

deptname
development
accounts

-- 8

SELECT empname FROM employee WHERE deptid != (SELECT deptid FROM dept WHERE deptname = 'hr');

empname
mano
venu

-- 9

SELECT empname FROM employee WHERE salary = (SELECT salary FROM employee ORDER BY salary DESC LIMIT 1,1);

empname
venu

-- 10

SELECT empname FROM employee WHERE salary>(SELECT salary FROM employee WHERE empname = 'mano');

empname
prakash
venu
abirami

-- 11

SELECT e.empid, e.empname, d.deptname FROM employee e LEFT JOIN dept d ON e.deptid = d.deptid;

empid	empname	deptname
1	john	hr
2	mano	testing
3	prakash	hr
4	venu	testing
5	abirami	hr

-- 12

SELECT deptid,deptname FROM dept WHERE deptid NOT IN (SELECT deptid FROM employee);

deptid	deptname
103	development
104	accounts