DBT Problem Solving - Set - 017

***Consider the following relations***

***author {authorID, name, surname}***

***books {bookID, name, pagecount, point, authorID, typeID}***

***students {studentID, name, surname, birthdate, gender, class, point}***

***borrows {borrowid, studentID, bookID, takenDate, broughtDate}***

***types {typeID, name}***

**Given the above relations solve the following queries.**

1. Write a query to display classwise monthwise count of birthdate, arrange the data classwise monthwise, the month should start with 'January'.
2. Write a query to display student name, book name, and book type name who have taken the 'Horror' book.
3. Write a query to display the student details with borrows details who have taken the book at '10:20 PM'.
4. Write a query to display book name as BookName, type name as BookType and pagecount for all books.
5. Write a query to display the book type and count how many books are available for every book type. Give column heading BookCount to appropriate column.
6. Write a query to display the count of book which was issued in the 3rd quarter of a year.
7. Write a query to display students who have not read books.
8. Write a query to display books that have never been read.
9. Write a query to display all students’ class names, but the same class names are listed only ones.
10. List all student’s name, surname and the borrow’s taken date, where student name 'Adley'.
11. Write a query to display all student’s name, surname and the borrows’ taken date. Students who do not read books are also listed.
12. Write a query to display all the data’s of students who do not read book.
13. Write a query to display all books of book type 'History'.
14. Write a query to display all the book type names for which books are not available.
15. Write a query to display the count of book, author 'William Dean' has written.

Answers Set – 017:

1. **select class, date\_format(birthdate, '%M') MonthName, count(\*) from students group by class, date\_format(birthdate, '%M') order by class, date\_format(birthdate, '%m') ;**
2. **select students.name, books.name, types.name from students, books, borrows, types where students.studentid = borrows.studentID and borrows.bookid = books.bookid and books.typeid = types.typeid and types.name = 'Horror';**
3. **select \* from students, borrows where students.studentId = borrows.studentId and date\_format(takendate, '%I:%i %p') = '10:20 PM';**
4. **select books.name BookName, types.name BookType, pagecount, point from books, types where books.typeid = types.typeid;**
5. **select types.name BookType, count(\*) BookCount from books, types where books.typeid = types.typeid group by types.name order by BookCount;**
6. **select quarter(takenDate), count(\*) from borrows where quarter(takenDate) = 3 group by quarter(takenDate);**
7. **select \* from students where studentId not in (select studentId from borrows);**
8. **select \* from books where bookId not in (select bookId from borrows);**
9. **select distinct class from students;**
10. **select name, surname, takenDate from students, borrows where students.studentId = borrows.studentId and name = 'Adley';**
11. **select \* from students left outer join borrows on students.studentId = borrows.studentId order by students.studentId;**
12. **select \* from students where not exists (select \* from borrows where students.studentId = borrows.studentId );**
13. **select \* from books, types where types.typeid = books.typeid and types.name = 'History';**
14. **select \* from types where not exists (select \* from books where types.typeid = books.typeid);**
15. **select authors.name, count(\*) from authors, books where authors.authorid = books.authorid and authors.name = 'William Dean' group by authors.name;**