

1. Sailors data base

Tables:

Sailors(sid: integer, sname: string, rating: integer, age: real)

Boats(bid: integer, bname: string, color: string)

Reserves(sid: integer, bid: integer, day: date)

Queries:

- i) Find all sailors with a rating above 7.
- ii) Find the names of sailors who have reserved a red or a green boat.
- iii) Find the age of the youngest sailor who is eligible to vote (i.e., is at least 18 years old) for each rating level with at least two such sailors.

program: Write a PL/SQL program to print the sum of even and odd numbers

2. Sailors data base

Sailors(sid: integer, sname: string, rating: integer, age: real)

Boats(bid: integer, bname: string, color: string)

Reserves(sid: integer, bid: integer, day: date)

Queries:

- i) Find sailors whose rating is better than every sailor called Horatio.
- ii) Find the names of sailors who are older than the oldest sailor with a rating of 10.
- iii) For each red boat, find the number of reservations for this boat.

Program: Write a PL/SQL program to print whether the given number is palindrome or not

3. Sailors data base

Sailors(sid: integer, sname: string, rating: integer, age: real)

Boats(bid: integer, bname: string, color: string)

Reserves(sid: integer, bid: integer, day: date)

Queries:

- i) Find the average age of sailors with a rating of 10.
- ii) Find the names of sailors who have not reserved a red boat.
- iii) Find sailors whose rating is better than every sailor called Horatio.

Program: Write a PL/SQL program to find the total and average of 4 subjects and display the grade.

4. Suppliers database

Tables: 1. Suppliers(sid: integer, sname: string, address: string)  
2. Parts(pid: integer, pname: string, color: string)  
3. Catalog(sid: integer, pid: integer, cost: real)

Queries:

- i) Find the snames of suppliers who supply red part.
- ii) For each part, find the sname of the supplier who charges the most for that part.
- iii) Find the pnames of parts supplied by Acme Widget Suppliers and by no one else.

Program: Prevent inserting a part into the Catalog table with a **negative cost**.

5. Suppliers database

Tables: 1. Suppliers(sid: integer, sname: string, address: string)  
2. Parts(pid: integer, pname: string, color: string)  
3. Catalog(sid: integer, pid: integer, cost: real)

Queries:

- i) Find the sids of suppliers who supply a red part and a green part.
- ii) Find the snames of suppliers who supply every red part.
- iii) Find the pnames of parts supplied by Acme Widget Suppliers.

Program: Ensure that minimum cost of a part is 50.

6. Consider the following relational schema and briefly answer the questions that follow:

Emp(eid: integer, ename: string, age: integer, salary: real)

Works(eid: integer, did: integer, pct time: integer)

Dept(did: integer, budget: real, managerid: integer)

- 1. Define a table constraint on Emp that will ensure that every employee makes at least \$10,000.
- 2. Define a table constraint on Dept that will ensure that all managers have age > 30.
- 3. Print the names and ages of each employee who works in both the Hardware department and the Software department.
- 4. Find the managerids of managers who manage only departments with budgets greater

than \$1,000,000.