

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.