

Practice Material

Based on Banking Database, find the equivalent (i) algebraic expression and (2) SQL statement

1. Find the names of all branches in the loan relation
2. Find the total number of branches in the loan relation
3. Find all loan numbers made at Perryridge branch with loan amounts greater than 1200
4. Find the loan number of those loans with loan amounts between 1000 and 1600
5. For all customers who have a loan, find their names, loan numbers and loan amount
6. Find customer names, loan numbers, and loan amounts for loans at Perryridge branch
7. Find the names of all branches that have assets greater than at least one branch located in Brooklyn
8. Find the names of all customers whose street address includes the substring 'Main'
9. Increase all account balances by 5 percent
10. List the entire loan relation in descending order of amount. If several loans have the same amount, order them in ascending order by loan number
11. Find all customers who have a loan, an account, or both at the bank
12. Find all customers who have both a loan and an account at the bank
13. Find all customers who have an account but no loan at the bank
14. Find the names of all branches in the account relation
15. Find the total number of branches in the account relation
16. Find all account numbers at the Perryridge branch with balance greater than 600
17. Find the account number of those accounts with balance between 500 and 800
18. For customers who have an account, find their names, account numbers and balance
19. Find customer names, account numbers, and balance for accounts at Brighton branch
20. List in alphabetic order all customers who have an account at the Brighton branch
21. List the entire account relation in descending order of balance. If several account have the same balance, order them in ascending order by account number
22. Find the average account balance at the Perryridge branch
23. Find the average account balance at each branch
24. Find the number of depositors for each branch
25. Find those branches where the average account balance is more than 500
26. Find the average balance for all accounts
27. Find the average balance for each customer who lives in Harrison and has at least two accounts
28. Write nested subquery to find the branch that has the highest average balance

29. Find all customers who have at most one account at the Perryridge branch
30. Find all customers who have at least two accounts at the Perryridge branch
31. Insert a new account A-9732 at the Sydney branch with a balance of 1200
32. Delete all account tuples in the Perryridge branch
33. Delete all loans with loan amounts between \$1300 and \$1500.
34. Delete all account tuples at every branch located in Dhaka
35. Delete the records of all accounts with balances below the average at the bank

Based on Hotel Database, find the equivalent (i) algebraic expression and (2) SQL statement

1. Find the guest who reside in the most expensive hotel
2. Find the total number of guests in each hotel
3. List the names and addresses of all guests in London, alphabetically ordered by name.
4. List all double or family rooms in ascending order of price.
5. How many hotels are there?
6. What is the average price of a room?
7. List the hotel names that are currently unoccupied.
8. How many different guests have made bookings for August?
9. List the price and type of all rooms at the Grosvenor Hotel.
10. List all guests currently staying at the Grosvenor Hotel.
11. List the details of all rooms at the Grosvenor Hotel, including the name of the guest staying in the room, if the room is occupied.
12. What is the total income from bookings for the Grosvenor Hotel today?
13. List the rooms that are currently unoccupied at the Grosvenor Hotel.
14. What is the lost income from unoccupied rooms at the Grosvenor Hotel at 23-10-2020?
15. List the number of rooms in each hotel.
16. List the number of rooms in each hotel in London.
17. What is the average number of bookings for each hotel in August?
18. What is the most commonly booked room type for each hotel in London?
19. What is the lost income from unoccupied rooms at each hotel at 23-10-2020?
20. List the name and address of all guests in Sheraton hotel alphabetically.