

Section 2.2 Exercises

1. For a database of Camosun College students, would the student name be a key?
2. For a database of Camosun College students, would the student number be a key?
3. For a database of Canadian citizens, would the social insurance number be a key?
4. For a database of Canadian residents, would the person's street address be a key?
5. For a bank's database of bank accounts, would the name of the account holder be a key?
6. For a bank's database of bank transactions, could you use the time and date of the transaction as a key?
7. For a database of students currently taking Math 161, under what conditions could you use the student name as a key?
8. For a database of students currently taking Math 161, under what conditions could you use the students' email addresses as a key?

Use the following tables to answer questions 9 through 22.

Account

Account Number	Customer Name	Branch	Balance	Type
123	Abby	Hillside	\$4000	Chequing
124	Ben	Hillside	\$5000	Savings
125	Charlie	Douglas	\$50	Chequing
126	Danielle	Hillside	\$-100	Chequing
127	Ed	Cadboro Bay	\$200	Savings
128	Ed	Cadboro Bay	\$4000	Chequing

Address

Branch	Street Address
Hillside	100 Hillside Avenue
Douglas	1050 Douglas Street
Cadboro Bay	2000 Cadboro Bay Road

Activity

Account Number	Status
125	Dormant
126	Overdrawn
127	Dormant

9. Write an operation to select the records of all accounts at the Cadboro Bay Branch.
10. Write an operation to list the names of all the customers and the type of account they have.
11. Write an operation on the relation Activity to select the records all of the accounts that are overdrawn.
12. Write an operation on the relation Address to select the current street addresses.
13. Write an operation on the relation Account to list the account numbers and the branch they belong to.
14. Write an operation on the relation Address to select the record of the Hillside branch.
15. Write an operation to add the branch address to the records in the top table.
16. Write an operation to add the activity to the records in the top table.
17. Write one or more operations to list the names of the customers with dormant accounts.
18. Write one or more operations to list the balance associated with the overdrawn accounts.
19. Write one or more operations to list the names of all customers with chequing accounts.
20. Write one or more operations to list the balance of all of Ed's accounts.
21. Write one or more operations to list the account number and the street address of the branch that the account is at.
22. Write one or more operations to list the account number and the street address of all dormant accounts.