

CPSC 304 Project Cover Page

Milestone #: 4

Date: November 24th, 2022

Group Number: 92

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By typing our names and student numbers in the above table, we certify that the work in the attached assignment was performed solely by those whose names and student IDs are included above. (In the case of Project Milestone 0, the main purpose of this page is for you to let us know your e-mail address, and then let us assign you to a TA for your project supervisor.)

In addition, we indicate that we are fully aware of the rules and consequences of plagiarism, as set forth by the Department of Computer Science and the University of British Columbia

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Repo link: https://github.students.cs.ubc.ca/CPSC304-2022W-T1/project_k2e8u_k6l0t_m8c8l

SQL script to initialize tables and initial data is in src/Main/data/init.sql

Project Description:

PNE2 is an application used by managers of an amusement park branch to manage staff, look for branches and the amount of staff hired in each branch, look for rides with restrictions, find cheap or expensive events, and even find customers who visited every branch (we call a super customer! Is it ethical to find such customers? I don't know)

We did not change the schema from milestone 2, we did, however, add more ticket tuples to a customer so that it could fit our division query.

Branches

	BRANCHID	BRANCHADDRESS	BRANCHNAME
1	B00000001	1234 Unicorn Road	PNE #2
2	B00000002	1234 Unicorn Street	PNE #3
3	B00000003	1234 Unicorn Drive	PNE #4
4	B00000004	1234 Uni Crescent	PNE #5
5	B00000005	1234 Unicorn Lane	PNE #6

Customers

	CUSTOMERID	AGE	EMAIL	TELEPHONENUMBER
1	C00000001	20	shubhGreaterkat@ethereum.org	7781231234
2	C00000002	20	boogers@gmail.com	6044206969
3	C00000003	65	katisbest@hotmail.com	7781231235
4	C00000004	10	georgie2012@icloud.com	7781231236
5	C00000005	11	cassidy11@icloud.com	7781231237

EventLocation table

	EVENTVENUE	EVENTDATE	EVENTNAME	BRANCHID
1	PNE #2	January 5th 2023	Rock n Roll	B00000001
2	PNE #3	March 5th 2024	Circus	B00000002
3	PNE #4	December 10th 2022	Beer Garden	B00000003
4	PNE #5	January 22nd 2023	Beer Garden	B00000004
5	PNE #6	May 18th 2023	Rock n Roll	B00000005

Events

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	EVENTID	EVENTDATE	EVENTVENUE	PRICE
1	E00000001	January 5th 2023	PNE #2	40
2	E00000002	March 5th 2024	PNE #3	20
3	E00000003	December 10th 2022	PNE #4	10
4	E00000004	January 22nd 2023	PNE #5	10
5	E00000005	May 18th 2023	PNE #6	40

FoodBelongsTo

	NAME	FOODSTANDID	PRICE
1	Double Double	F00000001	2
2	Donut	F00000002	2
3	Lemonade	F00000003	5
4	Nutella	F00000004	9
5	Milkshake	F00000005	7

FoodStandAt

	FOODSTANDID	BRANCHID
1	F00000001	B00000001
2	F00000002	B00000002
3	F00000003	B00000003
4	F00000004	B00000004
5	F00000005	B00000005

FoodStandPerson

	FOODSTANDID	STAFFID
1	F00000001	S00000006
2	F00000002	S00000007
3	F00000003	S00000008
4	F00000004	S00000009
5	F00000005	S00000010

FoodStands

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	FOODSTANDID	FOODSTANDNAME	FOODSTANDTYPE
1	F00000001	Tim Jortons	Fast Food
2	F00000002	Dunkin Cronuts	Fast Food
3	F00000003	Lemonade R Us	Drinks
4	F00000004	Beaver Nails	Dessert
5	F00000005	Triple Dohs	Fast Food

GamesOperator

	GAMESTANDID	STAFFID
1	G00000001	S00000001
2	G00000002	S00000002
3	G00000003	S00000003
4	G00000004	S00000004
5	G00000005	S00000005

GameStand

	GAMESTANDID	NAME	PRICE
1	G00000001	Bowling	5
2	G00000002	Shooting Range	5
3	G00000003	Rigged Ladder Game	10
4	G00000004	Baseball	5
5	G00000005	Dead Hang	10

GameStandAt

	GAMESTANDID	BRANCHID
1	G00000001	B00000001
2	G00000002	B00000002
3	G00000003	B00000003
4	G00000004	B00000004
5	G00000005	B00000005

Points

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	EMAIL	POINTS	NAME
1	boogers@gmail.com	69	Jaren
2	katisbest@hotmail.com	50	Katrina
3	georgie2012@icloud.com	25	Georgie
4	cassidy11@icloud.com	40	Cassidy
5	shubhGreaterkat@ethereum.org	50	Shubh

Restrictions

	WEIGHT	HEIGHT	HEALTHISSUES	RIDEID
1	200	200	pregnant	R00000001
2	200	200	pregnant	R00000002
3	30	70	none	R00000003
4	30	70	none	R00000004
5	200	200	pregnant	R00000005

RideAt

	RIDEID	BRANCHID
1	R00000001	B00000001
2	R00000002	B00000002
3	R00000003	B00000003
4	R00000004	B00000004
5	R00000005	B00000005

RideOperator

	RIDEID	STAFFID
1	R00000001	S00000011
2	R00000002	S00000012
3	R00000003	S00000013
4	R00000004	S00000014
5	R00000005	S00000015

Rides

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	🔑 RIDEID	NAME	RIDETYPE
1	R00000001	Elevator	Spooky
2	R00000002	Atmosphere	Spooky
3	R00000003	Easy Train	Kids
4	R00000004	Butterfly	Kids
5	R00000005	Screwdriver	Spooky

Staff

	🔑 STAFFID	NAME	HOMEADDRESS	TELEPHONENUMBER	BRANCHID
1	S00000001	Joe	123 Dogwood Drive	7782221234	B00000001
2	S00000002	Jess	123 Dogwood Street	7783331234	B00000002
3	S00000003	Darcy	123 Dogwood Crescent	7784441234	B00000003
4	S00000004	Sabrina	123 Dogwood Way	7785551234	B00000004
5	S00000005	Jack	123 Dogwood Lane	7786661234	B00000005
6	S00000006	Yeji	124 Dogwood Drive	7783333333	B00000001
7	S00000007	Ryujin	123 Dogwood Street	7784444444	B00000002
8	S00000008	Lia	124 Dogwood Crescent	7785555555	B00000003
9	S00000009	Chaeryeong	124 Dogwood Way	7786666666	B00000004
10	S00000010	Yuna	69 Dogwood Lane	7787777777	B00000005
11	S00000011	John	333 Dogwood Drive	7788888888	B00000001
12	S00000012	Blyke	333 Dogwood Street	7789999999	B00000002
13	S00000013	Sera	333 Dogwood Crescent	7781234567	B00000003
14	S00000014	Arlo	333 Dogwood Way	7781111111	B00000004
15	S00000015	Isen	333 Dogwood Lane	7782222222	B00000005

TicketPrice

	🔑 TICKETTYPE	TICKETPRICE
1	General	35
2	Senior	10
3	Child	25

Tickets

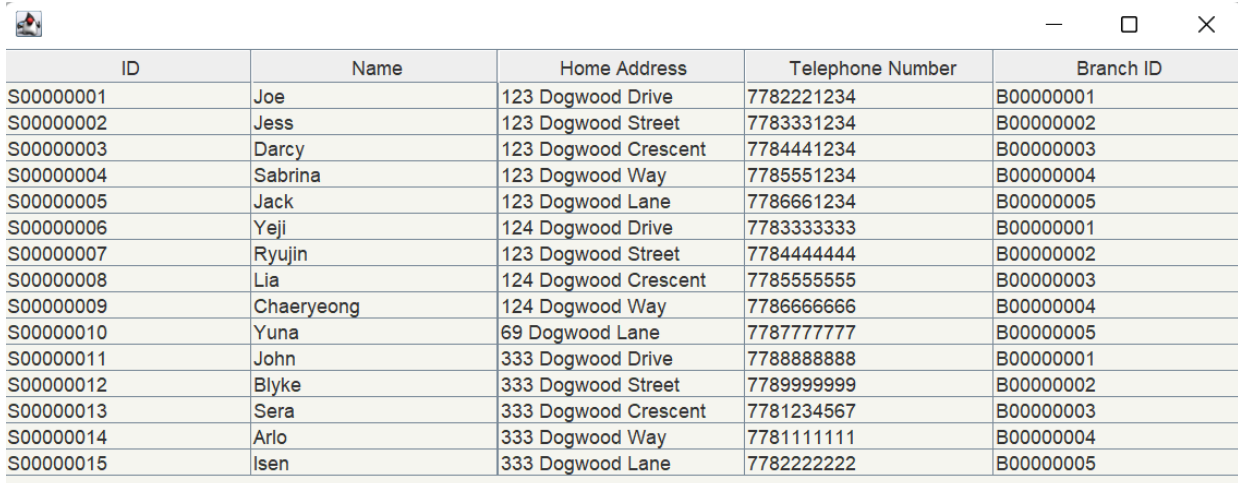
	🔑 TICKETID	DATEOFTICKET	🔑 CUSTOMERID	BRANCHID	TICKETTYPE
1	T00000001	October 15th 2022	C00000001	B00000001	General
2	T00000002	October 16th 2022	C00000002	B00000002	General
3	T00000003	October 18th 2022	C00000003	B00000003	Senior
4	T00000004	October 18th 2022	C00000004	B00000002	Child
5	T00000005	October 18th 2022	C00000005	B00000003	Child
6	T00000006	October 19th 2022	C00000005	B00000002	Child
7	T00000007	October 20th 2022	C00000005	B00000001	Child
8	T00000008	October 21st 2022	C00000005	B00000004	Child
9	T00000009	October 22nd 2022	C00000005	B00000005	Child

Screenshots of query result

INSERT - DatabaseConnectionHandler:67

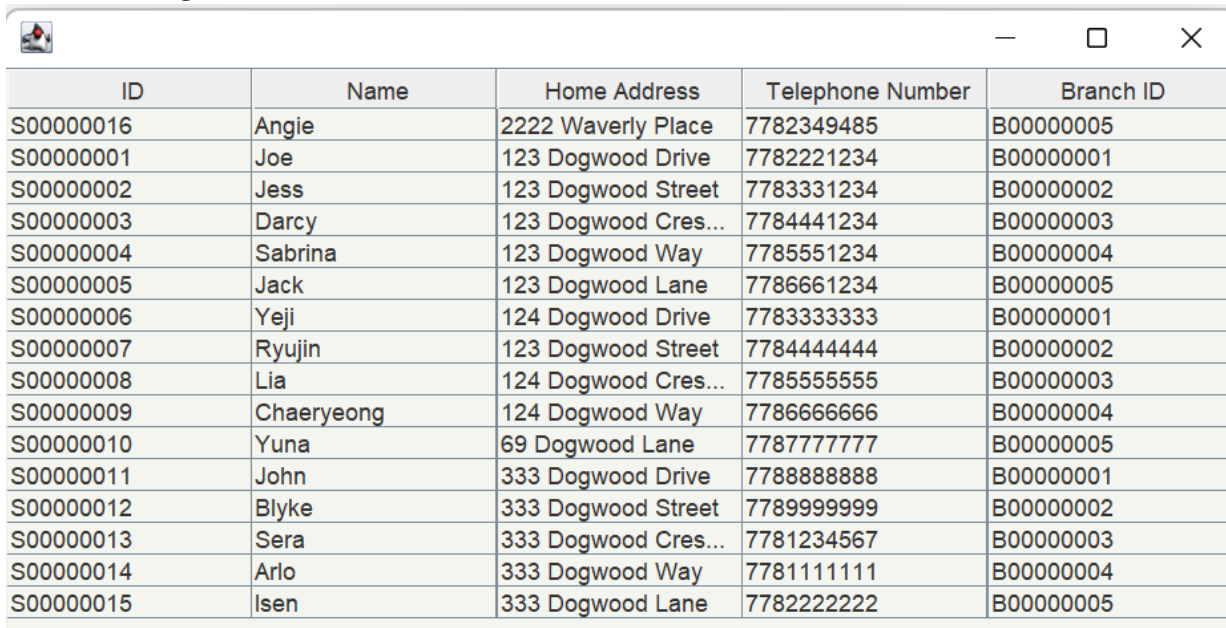
insertStaff(StaffModel model)

before inserting



ID	Name	Home Address	Telephone Number	Branch ID
S00000001	Joe	123 Dogwood Drive	7782221234	B00000001
S00000002	Jess	123 Dogwood Street	7783331234	B00000002
S00000003	Darcy	123 Dogwood Crescent	7784441234	B00000003
S00000004	Sabrina	123 Dogwood Way	7785551234	B00000004
S00000005	Jack	123 Dogwood Lane	7786661234	B00000005
S00000006	Yeji	124 Dogwood Drive	7783333333	B00000001
S00000007	Ryujin	123 Dogwood Street	7784444444	B00000002
S00000008	Lia	124 Dogwood Crescent	7785555555	B00000003
S00000009	Chaeryeong	124 Dogwood Way	7786666666	B00000004
S00000010	Yuna	69 Dogwood Lane	7787777777	B00000005
S00000011	John	333 Dogwood Drive	7788888888	B00000001
S00000012	Blyke	333 Dogwood Street	7789999999	B00000002
S00000013	Sera	333 Dogwood Crescent	7781234567	B00000003
S00000014	Arlo	333 Dogwood Way	7781111111	B00000004
S00000015	Isen	333 Dogwood Lane	7782222222	B00000005

after inserting



ID	Name	Home Address	Telephone Number	Branch ID
S00000016	Angie	2222 Waverly Place	7782349485	B00000005
S00000001	Joe	123 Dogwood Drive	7782221234	B00000001
S00000002	Jess	123 Dogwood Street	7783331234	B00000002
S00000003	Darcy	123 Dogwood Cres...	7784441234	B00000003
S00000004	Sabrina	123 Dogwood Way	7785551234	B00000004
S00000005	Jack	123 Dogwood Lane	7786661234	B00000005
S00000006	Yeji	124 Dogwood Drive	7783333333	B00000001
S00000007	Ryujin	123 Dogwood Street	7784444444	B00000002
S00000008	Lia	124 Dogwood Cres...	7785555555	B00000003
S00000009	Chaeryeong	124 Dogwood Way	7786666666	B00000004
S00000010	Yuna	69 Dogwood Lane	7787777777	B00000005
S00000011	John	333 Dogwood Drive	7788888888	B00000001
S00000012	Blyke	333 Dogwood Street	7789999999	B00000002
S00000013	Sera	333 Dogwood Cres...	7781234567	B00000003
S00000014	Arlo	333 Dogwood Way	7781111111	B00000004
S00000015	Isen	333 Dogwood Lane	7782222222	B00000005

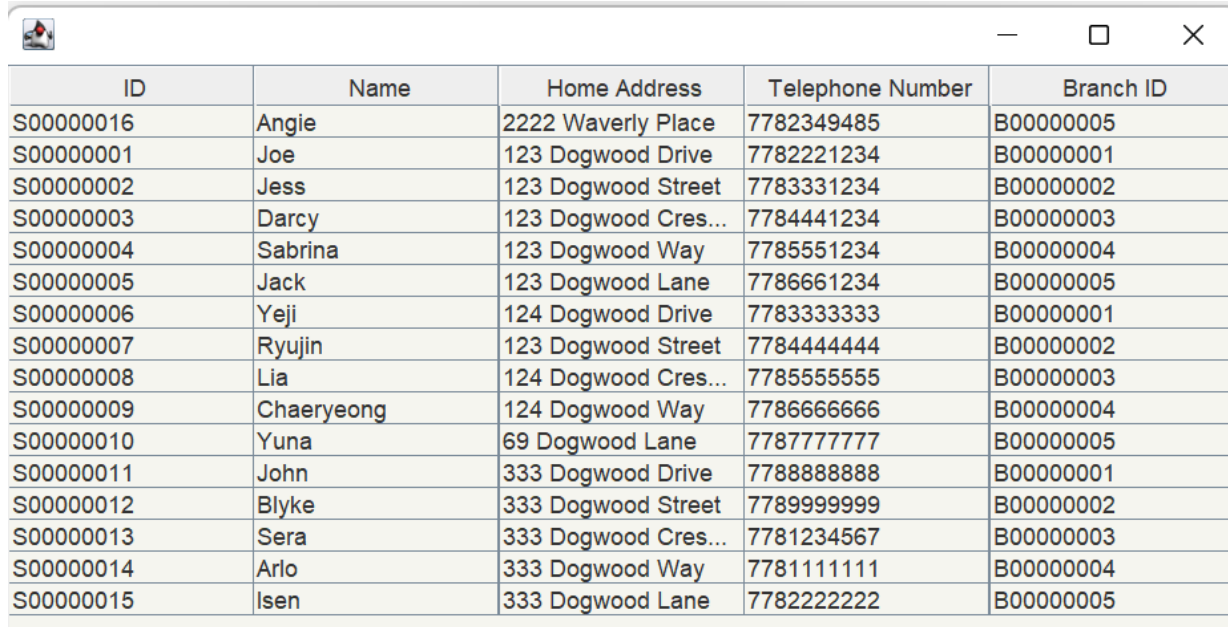
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DELETE - DatabaseConnectionHandler:124

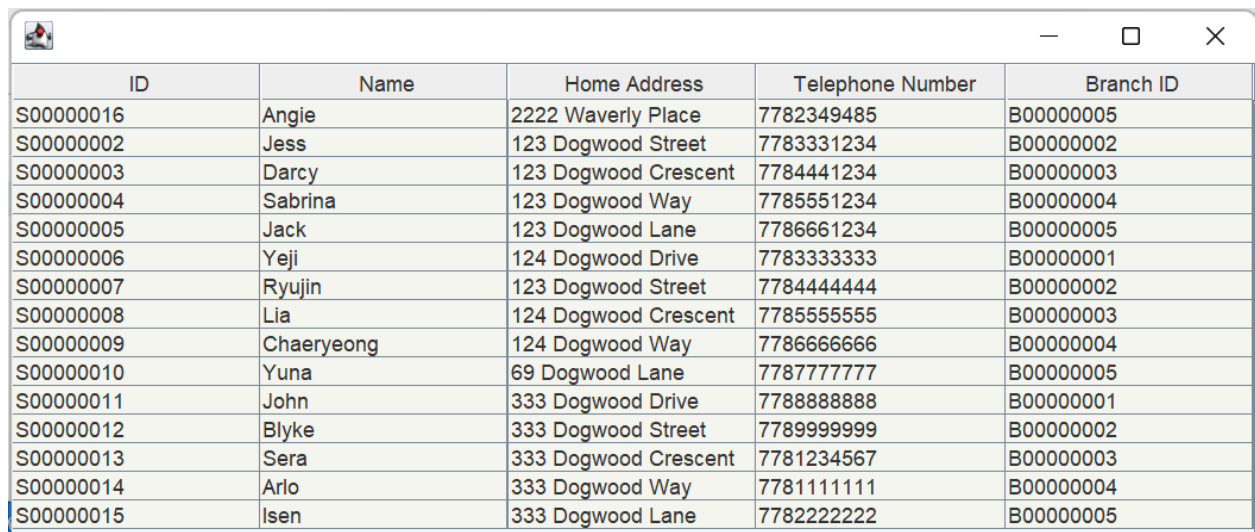
deleteStaff(String staffID)

before deleting S00000001



ID	Name	Home Address	Telephone Number	Branch ID
S00000016	Angie	2222 Waverly Place	7782349485	B00000005
S00000001	Joe	123 Dogwood Drive	7782221234	B00000001
S00000002	Jess	123 Dogwood Street	7783331234	B00000002
S00000003	Darcy	123 Dogwood Cres...	7784441234	B00000003
S00000004	Sabrina	123 Dogwood Way	7785551234	B00000004
S00000005	Jack	123 Dogwood Lane	7786661234	B00000005
S00000006	Yeji	124 Dogwood Drive	7783333333	B00000001
S00000007	Ryujin	123 Dogwood Street	7784444444	B00000002
S00000008	Lia	124 Dogwood Cres...	7785555555	B00000003
S00000009	Chaeryeong	124 Dogwood Way	7786666666	B00000004
S00000010	Yuna	69 Dogwood Lane	7787777777	B00000005
S00000011	John	333 Dogwood Drive	7788888888	B00000001
S00000012	Blyke	333 Dogwood Street	7789999999	B00000002
S00000013	Sera	333 Dogwood Cres...	7781234567	B00000003
S00000014	Arlo	333 Dogwood Way	7781111111	B00000004
S00000015	Isen	333 Dogwood Lane	7782222222	B00000005

after



ID	Name	Home Address	Telephone Number	Branch ID
S00000016	Angie	2222 Waverly Place	7782349485	B00000005
S00000002	Jess	123 Dogwood Street	7783331234	B00000002
S00000003	Darcy	123 Dogwood Crescent	7784441234	B00000003
S00000004	Sabrina	123 Dogwood Way	7785551234	B00000004
S00000005	Jack	123 Dogwood Lane	7786661234	B00000005
S00000006	Yeji	124 Dogwood Drive	7783333333	B00000001
S00000007	Ryujin	123 Dogwood Street	7784444444	B00000002
S00000008	Lia	124 Dogwood Crescent	7785555555	B00000003
S00000009	Chaeryeong	124 Dogwood Way	7786666666	B00000004
S00000010	Yuna	69 Dogwood Lane	7787777777	B00000005
S00000011	John	333 Dogwood Drive	7788888888	B00000001
S00000012	Blyke	333 Dogwood Street	7789999999	B00000002
S00000013	Sera	333 Dogwood Crescent	7781234567	B00000003
S00000014	Arlo	333 Dogwood Way	7781111111	B00000004
S00000015	Isen	333 Dogwood Lane	7782222222	B00000005

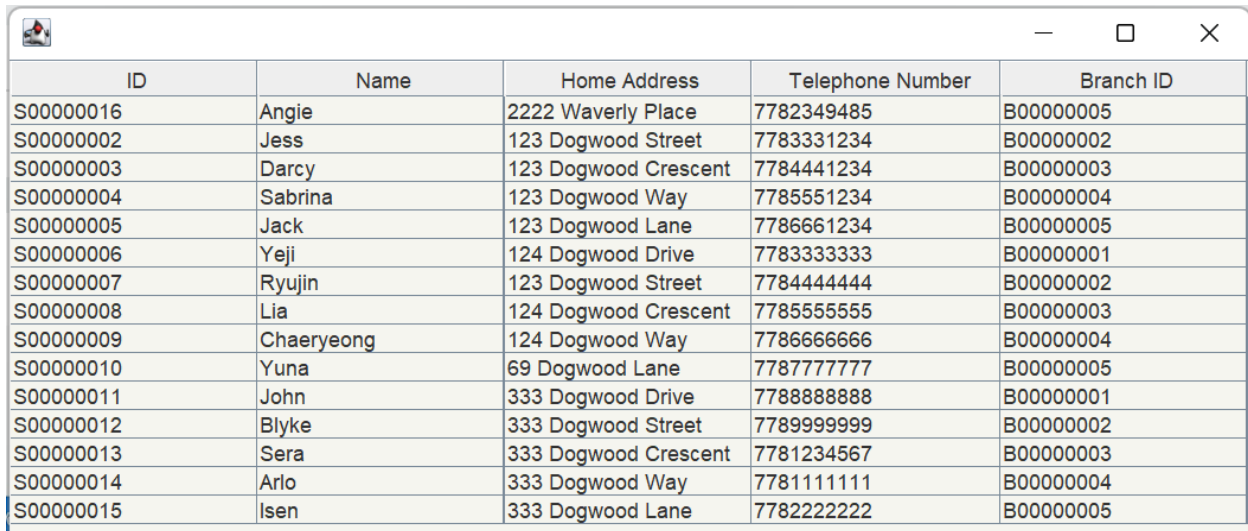
UPDATE - DatabaseConnectionHandler:91

updateStaff(String staffID, String option, String value)

change Jess name to Drake

before

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ID	Name	Home Address	Telephone Number	Branch ID
S00000016	Angie	2222 Waverly Place	7782349485	B00000005
S00000002	Jess	123 Dogwood Street	7783331234	B00000002
S00000003	Darcy	123 Dogwood Crescent	7784441234	B00000003
S00000004	Sabrina	123 Dogwood Way	7785551234	B00000004
S00000005	Jack	123 Dogwood Lane	7786661234	B00000005
S00000006	Yeji	124 Dogwood Drive	7783333333	B00000001
S00000007	Ryujin	123 Dogwood Street	7784444444	B00000002
S00000008	Lia	124 Dogwood Crescent	7785555555	B00000003
S00000009	Chaeryeong	124 Dogwood Way	7786666666	B00000004
S00000010	Yuna	69 Dogwood Lane	7787777777	B00000005
S00000011	John	333 Dogwood Drive	7788888888	B00000001
S00000012	Blyke	333 Dogwood Street	7789999999	B00000002
S00000013	Sera	333 Dogwood Crescent	7781234567	B00000003
S00000014	Arlo	333 Dogwood Way	7781111111	B00000004
S00000015	Isen	333 Dogwood Lane	7782222222	B00000005

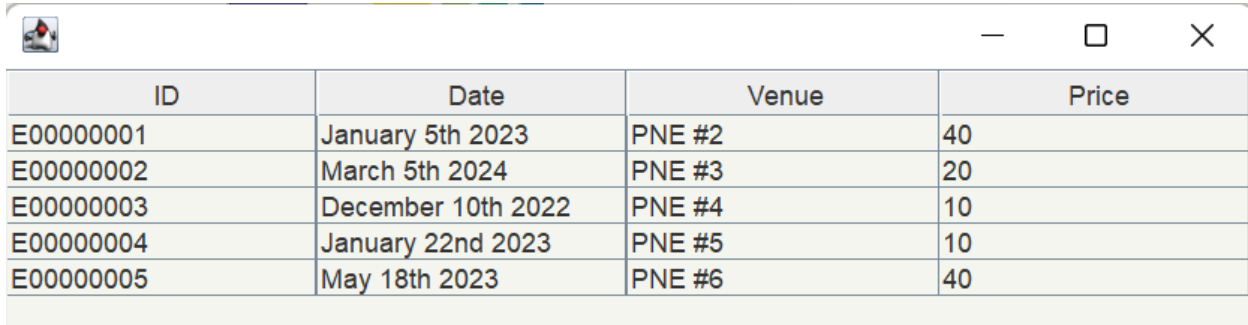
after

SELECTION - DatabaseConnectionHandler:164
showCheapEvents()

- DatabaseConnectionHandler:190

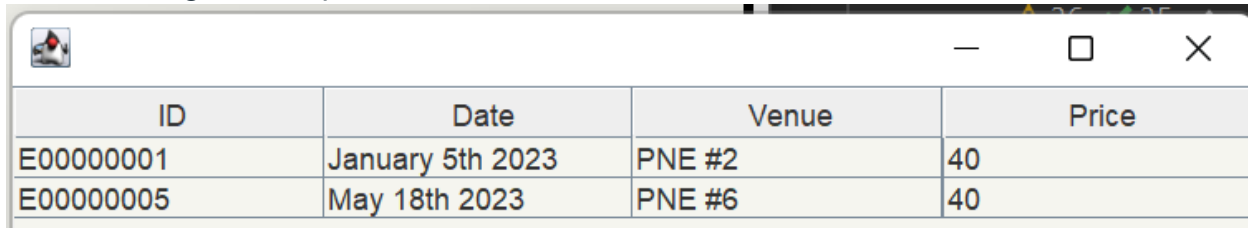
showExpensiveEvents()

before



ID	Date	Venue	Price
E00000001	January 5th 2023	PNE #2	40
E00000002	March 5th 2024	PNE #3	20
E00000003	December 10th 2022	PNE #4	10
E00000004	January 22nd 2023	PNE #5	10
E00000005	May 18th 2023	PNE #6	40

after selecting most expensive



ID	Date	Venue	Price
E00000001	January 5th 2023	PNE #2	40
E00000005	May 18th 2023	PNE #6	40

PROJECTION - DatabaseConnectionHandler:346
showRidesWithRestrictions()
select rides and their restrictions

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Name	Weight Restriction	Height Restriction	Other Health Restrictions
Elevator	200	200	pregnant
Atmosphere	200	200	pregnant
Easy Train	30	70	none
Butterfly	30	70	none
Screwdriver	200	200	pregnant

GROUP BY - DatabaseConnectionHandler:243

showNumberOfStaffAtEachBranch()

before

ID	Name	Home Address	Telephone Number	Branch ID
S00000016	Angie	2222 Waverly Place	7782349485	B00000005
S00000002	Drake	123 Dogwood Street	7783331234	B00000002
S00000003	Darcy	123 Dogwood Crescent	7784441234	B00000003
S00000004	Sabrina	123 Dogwood Way	7785551234	B00000004
S00000005	Jack	123 Dogwood Lane	7786661234	B00000005
S00000006	Yeji	124 Dogwood Drive	7783333333	B00000001
S00000007	Ryujin	123 Dogwood Street	7784444444	B00000002
S00000008	Lia	124 Dogwood Crescent	7785555555	B00000003
S00000009	Chaeryeong	124 Dogwood Way	7786666666	B00000004
S00000010	Yuna	69 Dogwood Lane	7787777777	B00000005
S00000011	John	333 Dogwood Drive	7788888888	B00000001
S00000012	Blyke	333 Dogwood Street	7789999999	B00000002
S00000013	Sera	333 Dogwood Crescent	7781234567	B00000003
S00000014	Arlo	333 Dogwood Way	7781111111	B00000004
S00000015	Isen	333 Dogwood Lane	7782222222	B00000005

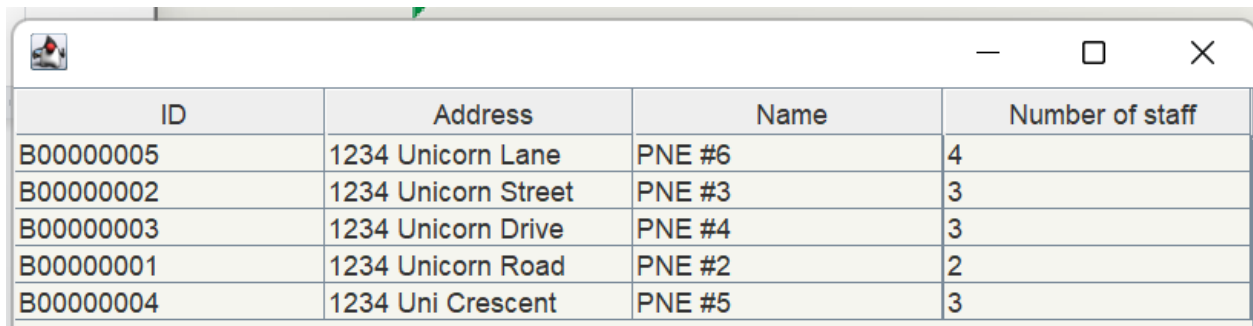
group by branch

ID	Address	Name	Number of staff
B00000005	1234 Unicorn Lane	PNE #6	4
B00000002	1234 Unicorn Street	PNE #3	3
B00000003	1234 Unicorn Drive	PNE #4	3
B00000001	1234 Unicorn Road	PNE #2	2
B00000004	1234 Uni Crescent	PNE #5	3

HAVING - DatabaseConnectionHandler:252

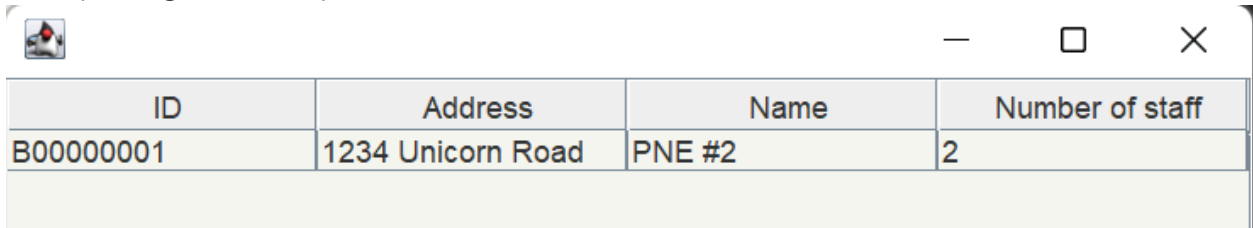
showBranchesWithLowAmountOfStaff()

before



ID	Address	Name	Number of staff
B00000005	1234 Unicorn Lane	PNE #6	4
B00000002	1234 Unicorn Street	PNE #3	3
B00000003	1234 Unicorn Drive	PNE #4	3
B00000001	1234 Unicorn Road	PNE #2	2
B00000004	1234 Uni Crescent	PNE #5	3

after (having staff# < 3)

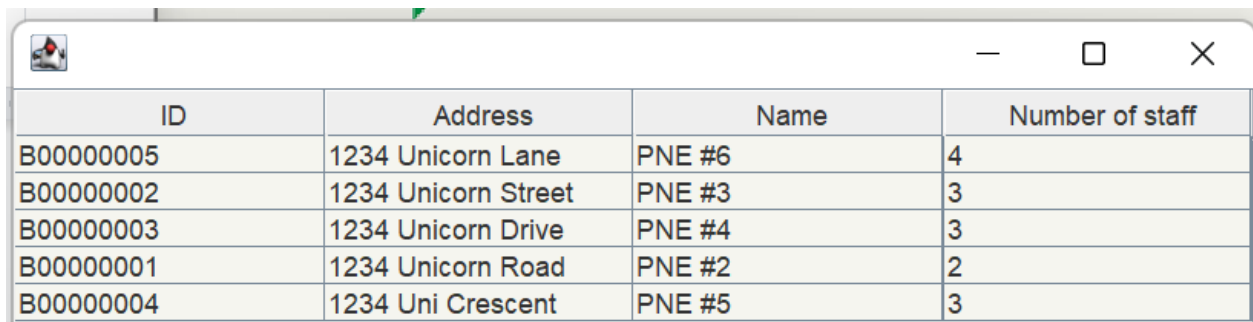


ID	Address	Name	Number of staff
B00000001	1234 Unicorn Road	PNE #2	2

NESTED GROUP BY - DatabaseConnectionHandler:285

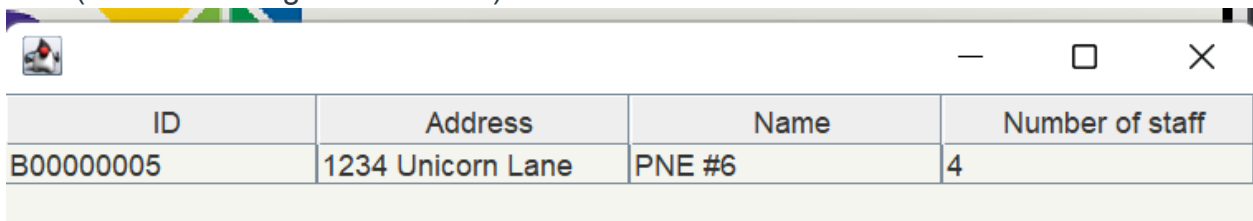
findBranchWithMostStaff()

before



ID	Address	Name	Number of staff
B00000005	1234 Unicorn Lane	PNE #6	4
B00000002	1234 Unicorn Street	PNE #3	3
B00000003	1234 Unicorn Drive	PNE #4	3
B00000001	1234 Unicorn Road	PNE #2	2
B00000004	1234 Uni Crescent	PNE #5	3

after (branch with highest # of staff)



ID	Address	Name	Number of staff
B00000005	1234 Unicorn Lane	PNE #6	4

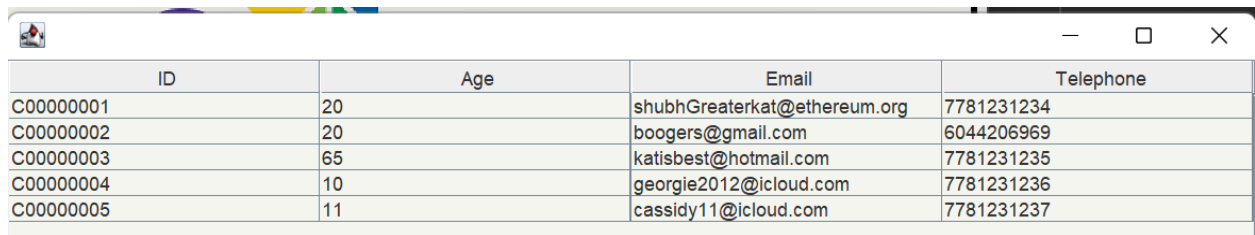
DIVISION - DatabaseConnectionHandler:298

findSuperCustomers()

before

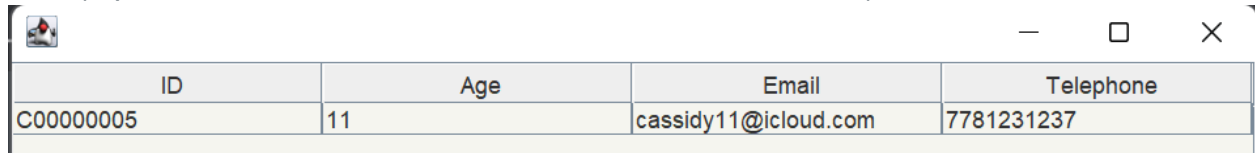
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ID	Age	Email	Telephone
C00000001	20	shubhGreaterkat@ethereum.org	7781231234
C00000002	20	boogers@gmail.com	6044206969
C00000003	65	katisbest@hotmail.com	7781231235
C00000004	10	georgie2012@icloud.com	7781231236
C00000005	11	cassidy11@icloud.com	7781231237

after (top customer = customer who has been to all branches)



ID	Age	Email	Telephone
C00000005	11	cassidy11@icloud.com	7781231237