

MySQL Workbench

Local instance MySQL80

File Edit View Query Database Server Tools Scripting Help

Navigator

SCHEMAS

Filter objects

park_and_recreation

Tables

credit_card

customer

employee_demo

employee_salary

park_department

Views

Stored Procedures

Functions

sys

Administration Schemas

Information

customer21

1 -- 1. Select all customers

2 SELECT * FROM parks_and_recreation.customer;

3

4

5

6

7

8

9

Result Grid

Filter Rows

Export

Wrap Cell Contents

Fetch rows

Client_Num Customer_Age Gender Dependent_Count Education_Level Marital_Status state_cd Zipcode Car_Owner House_Owner Personal_loan contact Customer_Job

708082083 24 F 1 Uneducated Single FL 91750 no yes no unknown Businessman 2

708083283 62 F 0 Unknown Married NJ 91750 no no no cellular Selfemployed 5

708084558 32 F 1 Unknown Married NJ 91750 yes no no unknown Selfemployed 1

708085458 38 M 2 Uneducated Single NY 91750 no no no cellular Blue-collar 4

708086958 48 M 4 Graduate Single TX 91750 yes yes no cellular Businessman 5

708095133 33 F 1 High School Single NY 91750 no yes no cellular Selfemployed 1

708098133 34 F 3 Graduate Single CA 91750 yes no no telephone Selfemployed 1

708099183 34 F 2 Uneducated Single CA 91750 no no no cellular Retirees 3

708100533 48 M 2 High School Married NJ 91750 yes no no telephone Businessman 8

SQL Additions

Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.

Read Only Context Help Snippets

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customer11 customer12

1 -- 1. Select all customers

2 SELECT * FROM parks_and_recreation.customer;

3

4 -- 2. Filter customers older than 40 and sort by age

5 SELECT

6 Client_Num,

7 Customer_Age,

8 Gender

9 FROM customer

Result Grid

Filter Rows

Export

Wrap Cell Contents

Fetch rows

Client_Num Customer_Age Gender

712939533 73 M

720846558 70 M

778407033 68 M

714736558 68 F

715041333 67 F

803406558 67 M

718619883 67 F

720408708 67 M

771492408 66 F

771829758 66 F

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customer24 customer25 credit_card 26

9 Gender

10 FROM customer

11 WHERE Customer_Age > 40

12 ORDER BY Customer_Age DESC;

13

14

15 -- 3. Select all credit cards

16 SELECT *

17 FROM credit_card;

Result Grid

Filter Rows

Export

Wrap Cell Contents

Fetch rows

Client_Num Card_Category Annual_Fees Activation_30_Days Customer_Acq_Cost Week_Start_Date Week_Num Qtr current_year Credit_Limit Total_Revolving_Bal Total_Trans

708082083 Blue 200 0 87 01-01-2023 Week-1 Q1 2023 3544 1661 15149

708083283 Blue 445 1 108 01-01-2023 Week-1 Q1 2023 3421 2517 992

708084558 Blue 140 0 106 01-01-2023 Week-1 Q1 2023 8258 1771 1447

708085458 Blue 250 1 150 01-01-2023 Week-1 Q1 2023 1438.3 0 3940

708086958 Blue 320 1 106 01-01-2023 Week-1 Q1 2023 3128 749 4369

708095133 Blue 100 0 94 01-01-2023 Week-1 Q1 2023 33304 1833 1448

708098133 Blue 225 1 75 01-01-2023 Week-1 Q1 2023 2834 1418 1598

708099183 Blue 400 1 75 01-01-2023 Week-1 Q1 2023 5723 1873 2732

708100533 Blue 700 1 64 01-01-2023 Week-1 Q1 2023 2679 7777 4941

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sys

Limit to 1000 rows

18

19

20 -- 4. Group by Education Level and count

21 * SELECT

22 Education_Level,

23 COUNT(*) AS total_customers

24 FROM customer

25 GROUP BY Education_Level

26 ORDER BY total_customers DESC;

Result Grid

Education_Level	total_customers
Graduate	4134
High School	2009
Unknown	1515
Uneducated	1483
Post-Graduate	516
Doctorate	451

customer 28 customer 29 credit_card 30 Result 31 x

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Limit to 1000 rows

29 -- 5. INNER JOIN: Customer with their credit card info

30 * SELECT

31 c.Client_Num,

32 c.Customer_Age,

33 cc.Card_Category,

34 cc.Credit_Limit

35 FROM customer AS c

36 INNER JOIN credit_card AS cc

37 ON c.Client_Num = cc.Client_Num

Result Grid

Client_Num	Customer_Age	Card_Category	Credit_Limit
785529708	58	Blue	34516
719831958	38	Blue	34516
778943883	54	Blue	34516
778956033	56	Blue	34516
815761908	32	Silver	34516
824150733	43	Silver	34516
779502333	64	Silver	34516
719874633	51	Gold	34516
779519058	52	Platinum	34516
823863033	56	Silver	34516

customer 32 customer 33 credit_card 34 Result 35 Result 36 x

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sys

Limit to 1000 rows

38 ORDER BY cc.Credit_Limit DESC;

39

40 -- 6. LEFT JOIN: All customers even without credit cards

41 * SELECT

42 c.Client_Num,

43 c.Customer_Age,

44 cc.Card_Category

45 FROM customer AS c

46 LEFT JOIN credit_card AS cc

47 ON c.Client_Num = cc.Client_Num;

Result Grid

Client_Num	Customer_Age	Card_Category
708082083	24	Blue
708083283	62	Blue
708084558	32	Blue
708085488	38	Blue
708086958	48	Blue
708095133	33	Blue
708098133	34	Blue
708099183	34	Blue
708100533	48	Blue

customer 37 customer 38 credit_card 39 Result 40 Result 41 Result 42 x

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Functions

sys

Limit to 1000 rows

47 ON c.Client_Num = cc.Client_Num;

48

49 -- 7. RIGHT JOIN: All credit cards even without matching customers

50 SELECT

51 c.Client_Num,

52 c.Customer_Age,

53 cc.Card_Category

54 FROM customer AS c

55 RIGHT JOIN credit_card AS cc

56 ON c.Client_Num = cc.Client_Num;

57

Result Grid

Client_Num	Customer_Age	Card_Category
708082083	24	Blue
708083283	62	Blue
708084558	32	Blue
708085458	38	Blue
708086958	48	Blue
708095133	33	Blue
708098133	34	Blue
708099183	34	Blue

Output

No object selected

Object Info Session

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File Edit View Query Database Server Tools Scripting Help

Navigator

SCHEMAS

Filter objects

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credit_card

customer

employee_demo

employee_salary

park_department

Views

Stored Procedures

Functions

sys

Limit to 1000 rows

58 -- 8. Customers with above average credit limit

59 SELECT

60 c.Client_Num,

61 cc.Credit_Limit

62 FROM customer AS c

63 INNER JOIN credit_card AS cc

64 ON c.Client_Num = cc.Client_Num

65 WHERE cc.Credit_Limit > (

66 SELECT AVG(Credit_Limit)

67 FROM credit_card

68)

Result Grid

Client_Num	Credit_Limit
708095133	33304
708103608	11898
708112008	23510
708119658	12836
708121908	22917
708123033	11463
708132783	16411
708147108	21084

Output

No object selected

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Navigator

SCHEMAS

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credit_card

customer

employee_demo

employee_salary

park_department

Views

Stored Procedures

Functions

sys

Limit to 1000 rows

70

-- 9. Average transaction amount per card category

71

72 * SELECT

73 Card_Category,

74 AVG(Total_Trans_Amt) AS avg_transaction_amount

75 FROM credit_card

76 GROUP BY Card_Category

77 ORDER BY avg_transaction_amount DESC;

78

79

80

Result Grid

Filter Rows:

Export

Wrap Cell Contents: IS

Card_Category avg_transaction_amount

Platinum 14228.5672

Gold 10766.3723

Silver 7178.0963

Blue 4011.0565

Administration Schemas

Information

No object selected

customer 66 customer 67 credit_card 68 Result 69 Result 70 Result 71 Result 72 Result 73 Result 74 x

Read Only Context Help Snippets

Output

Action Output

Time Action Message Duration / Fetch

70 00:05:50 SELECT Education_Level, COUNT(*) AS total_customers FROM customer GROUP BY Education_Level O... 6 row(s) returned 0.031 sec / 0.000 sec

71 00:05:50 SELECT c.Client_Num, c.Customer_Age, cc.Card_Category, cc.Credit_Limit FROM customer AS c IN... 1000 row(s) returned 0.046 sec / 0.000 sec

72 00:05:50 SELECT c.Client_Num, c.Customer_Age, cc.Card_Category FROM customer AS c LEFT JOIN credit_ca... 1000 row(s) returned 0.016 sec / 0.000 sec

73 00:05:50 SELECT c.Client_Num, c.Customer_Age, cc.Card_Category FROM customer AS c RIGHT JOIN credit_ca... 1000 row(s) returned 0.016 sec / 0.000 sec

74 00:05:50 SELECT c.Client_Num, cc.Credit_Limit FROM customer AS c INNER JOIN credit_card AS cc ON c.Cle... 1000 row(s) returned 0.015 sec / 0.000 sec

75 00:05:50 SELECT Card_Category, AVG(Total_Trans_Amt) AS avg_transaction_amount FROM credit_card GROUP ... 4 row(s) returned 0.031 sec / 0.000 sec

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File Edit View Query Database Server Tools Scripting Help

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Stored Procedures

Functions

sys

Limit to 1000 rows

78

-- 10. Total transaction volume per card category

79

80 * SELECT

81 Card_Category,

82 SUM(Total_Trans_Vol) AS total_volume

83 FROM credit_card

84 GROUP BY Card_Category

85 ORDER BY total_volume DESC;

86

87

88

Result Grid

Filter Rows:

Export

Wrap Cell Contents: IS

Card_Category total_volume

Blue 58138

Silver 48599

Gold 18224

Platinum 7490

Administration Schemas

Information

No object selected

customer 75 customer 76 credit_card 77 Result 78 Result 79 Result 80 Result 81 Result 82 Result 83 Result 84 x

Read Only Context Help Snippets

Output

Action Output

Time Action Message Duration / Fetch

80 00:07:41 SELECT c.Client_Num, c.Customer_Age, cc.Card_Category, cc.Credit_Limit FROM customer AS c IN... 1000 row(s) returned 0.047 sec / 0.016 sec

81 00:07:41 SELECT c.Client_Num, c.Customer_Age, cc.Card_Category FROM customer AS c LEFT JOIN credit_ca... 1000 row(s) returned 0.000 sec / 0.000 sec

82 00:07:41 SELECT c.Client_Num, c.Customer_Age, cc.Card_Category FROM customer AS c RIGHT JOIN credit_ca... 1000 row(s) returned 0.000 sec / 0.000 sec

83 00:07:41 SELECT c.Client_Num, cc.Credit_Limit FROM customer AS c INNER JOIN credit_card AS cc ON c.Cle... 1000 row(s) returned 0.031 sec / 0.000 sec

84 00:07:41 SELECT Card_Category, AVG(Total_Trans_Amt) AS avg_transaction_amount FROM credit_card GROUP ... 4 row(s) returned 0.031 sec / 0.000 sec

85 00:07:41 SELECT Card_Category, SUM(Total_Trans_Vol) AS total_volume FROM credit_card GROUP BY Card_Cat... 4 row(s) returned 0.031 sec / 0.000 sec

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Functions

sys

Limit to 1000 rows

89 -- 11. Create a view with full customer + credit card info

90 DROP VIEW customer_credit_info_v2;

91 CREATE VIEW customer_credit_info_v2 AS

92 SELECT

93 c.Client_Num,

94 c.Customer_Age,

95 c.Gender,

96 c.Education_Level,

97 cc.Card_Category,

98 cc.Credit_Limit,

99 cc.Total_Trans_Amt

100 FROM customer AS c

101 INNER JOIN credit_card AS cc

102 ON c.Client_Num = cc.Client_Num;

103

Result Grid

Card_Category total_volume

Blue 581338

Silver 48599

Gold 18224

Platinum 7490

No object selected

Output

customer 125 customer 126 credit_card 127 Result 128 Result 129 Result 130 Result 131 Result 132 Result 133 Result 134 x

Read Only Context Help Snippets

Action Output

Time Action Message Duration / Fetch

139 00:21:02 SELECT c.Client_Num, c.Customer_Age, cc.Card_Category FROM customer AS c RIGHT JOIN credit_... 1000 row(s) returned 0.016 sec / 0.000 sec

140 00:21:03 SELECT c.Client_Num, cc.Credit_Limit FROM customer AS c INNER JOIN credit_card AS cc ON c.Cle... 1000 row(s) returned 0.015 sec / 0.000 sec

141 00:21:03 SELECT Card_Category, AVG(Total_Trans_Amt) AS avg_transaction_amount FROM credit_card GROUP ... 4 row(s) returned 0.031 sec / 0.000 sec

142 00:21:03 SELECT Card_Category, SUM(Total_Trans_Vol) AS total_volume FROM credit_card GROUP BY Card_Cat... 4 row(s) returned 0.031 sec / 0.000 sec

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Functions

sys

Limit to 1000 rows

103

104

105

106 -- 12. Create indexes for faster JOINS and filtering

107 CREATE INDEX idx_customer_age ON customer(Customer_Age);

108 CREATE INDEX idx_credit_limit ON credit_card(Credit_Limit);

109

110

111

112

113

114

115

116

117

Result Grid

Card_Category total_volume

Blue 581338

Silver 48599

Gold 18224

Platinum 7490

No object selected

Output

customer 255 customer 256 credit_card 257 Result 258 Result 259 Result 260 Result 261 Result 262 Result 263 Result 264 x

Read Only Context Help Snippets

Action Output

Time Action Message Duration / Fetch

316 00:36:29 CREATE VIEW customer_credit_info_v2 AS SELECT c.Client_Num, c.Customer_Age, c.Gender, c.E... 0 row(s) affected 0.000 sec

317 00:36:29 CREATE INDEX idx_customer_age ON customer(Customer_Age) 0 row(s) affected Records: 0 Duplicates: 0 Warnings: 0 0.063 sec

318 00:36:29 CREATE INDEX idx_credit_limit ON credit_card(Credit_Limit) 0 row(s) affected Records: 0 Duplicates: 0 Warnings: 0 0.062 sec

Object Info Session

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