mysql> #Question: The percentage of invoice that are COD.

mysql> CREATE INDEX payment\_method\_idx ON sale\_details(payment\_method(2));

Query OK, 0 rows affected (0.04 sec)

Records: 0 Duplicates: 0 Warnings: 0

mysql> SELECT sale\_details\_sk,

-> (SELECT COUNT(payment\_method)

-> FROM sale\_details

-> WHERE payment\_method='cod')\*100/(COUNT(payment\_method)) AS COD\_percentage

-> FROM sale\_details;

+-----------------+----------------+

| sale\_details\_sk | COD\_percentage |

+-----------------+----------------+

| 1 | 38.0952 |

+-----------------+----------------+

1 row in set (0.00 sec)

mysql> #Question: The sales by supplier state to customer state. This would be useful to see if suppliers should ship directly to customers

mysql> CREATE INDEX state\_idx ON customer(state(2));

Query OK, 0 rows affected (0.03 sec)

Records: 0 Duplicates: 0 Warnings: 0

mysql> SELECT sales\_fact.amount AS Sales,

-> customer.state AS 'Customer State',

-> supplier.state AS 'Supplier State'

-> FROM customer

-> JOIN sales\_fact ON customer.customersk=sales\_fact.customersk\_fk

-> JOIN supplier ON supplier.suppliersk=sales\_fact.suppliersk\_fk

-> GROUP BY 2,3;

+--------+----------------+----------------+

| Sales | Customer State | Supplier State |

+--------+----------------+----------------+

| 320.00 | NULL | NULL |

| 344.00 | AK | FL |

| 203.00 | AK | KS |

| 361.00 | AK | KY |

| 113.00 | AK | MI |

| 191.00 | AK | MN |

| 301.00 | AK | PA |

| 161.00 | AK | VA |

| 133.00 | AK | WA |

| 317.00 | AZ | FL |

| 167.00 | AZ | KS |

| 257.00 | AZ | KY |

| 162.00 | AZ | MI |

| 106.00 | AZ | MN |

| 219.00 | AZ | PA |

| 379.00 | AZ | VA |

| 376.00 | AZ | WA |

| 346.00 | CA | FL |

| 113.00 | CA | KS |

| 110.00 | CA | KY |

| 381.00 | CA | MI |

| 322.00 | CA | MN |

| 148.00 | CA | PA |

| 206.00 | CA | VA |

| 290.00 | CA | WA |

| 190.00 | DC | FL |

| 350.00 | DC | KS |

| 167.00 | DC | KY |

| 351.00 | DC | MI |

| 250.00 | DC | MN |

| 161.00 | DC | PA |

| 134.00 | DC | VA |

| 125.00 | DC | WA |

| 129.00 | DE | FL |

| 240.00 | DE | KS |

| 102.00 | DE | KY |

| 351.00 | DE | MI |

| 399.00 | DE | MN |

| 307.00 | DE | PA |

| 191.00 | DE | VA |

| 205.00 | DE | WA |

| 228.00 | FL | FL |

| 327.00 | FL | KS |

| 397.00 | FL | KY |

| 185.00 | FL | MI |

| 335.00 | FL | MN |

| 382.00 | FL | PA |

| 387.00 | FL | VA |

| 261.00 | FL | WA |

| 361.00 | GA | FL |

| 259.00 | GA | KS |

| 357.00 | GA | KY |

| 251.00 | GA | MI |

| 115.00 | GA | MN |

| 361.00 | GA | PA |

| 174.00 | GA | VA |

| 267.00 | GA | WA |

| 265.00 | HI | FL |

| 246.00 | HI | KS |

| 363.00 | HI | KY |

| 155.00 | HI | MI |

| 211.00 | HI | MN |

| 399.00 | HI | PA |

| 385.00 | HI | VA |

| 177.00 | HI | WA |

| 330.00 | KY | FL |

| 163.00 | KY | KS |

| 226.00 | KY | KY |

| 394.00 | KY | MI |

| 265.00 | KY | MN |

| 321.00 | KY | PA |

| 210.00 | KY | VA |

| 105.00 | KY | WA |

| 182.00 | LA | FL |

| 379.00 | LA | KS |

| 194.00 | LA | KY |

| 338.00 | LA | MI |

| 181.00 | LA | MN |

| 202.00 | LA | PA |

| 200.00 | LA | VA |

| 294.00 | LA | WA |

| 128.00 | ME | FL |

| 135.00 | ME | KS |

| 259.00 | ME | KY |

| 224.00 | ME | MI |

| 316.00 | ME | MN |

| 340.00 | ME | PA |

| 357.00 | ME | VA |

| 245.00 | ME | WA |

| 358.00 | MS | FL |

| 157.00 | MS | KS |

| 309.00 | MS | KY |

| 162.00 | MS | MI |

| 103.00 | MS | MN |

| 349.00 | MS | PA |

| 176.00 | MS | VA |

| 176.00 | MS | WA |

| 168.00 | NC | FL |

| 178.00 | NC | KS |

| 283.00 | NC | KY |

| 129.00 | NC | MI |

| 369.00 | NC | MN |

| 346.00 | NC | PA |

| 398.00 | NC | VA |

| 117.00 | NC | WA |

| 361.00 | ND | FL |

| 292.00 | ND | KS |

| 328.00 | ND | KY |

| 335.00 | ND | MI |

| 348.00 | ND | MN |

| 131.00 | ND | PA |

| 126.00 | ND | VA |

| 308.00 | ND | WA |

| 286.00 | NE | FL |

| 360.00 | NE | KS |

| 346.00 | NE | KY |

| 123.00 | NE | MI |

| 334.00 | NE | MN |

| 123.00 | NE | PA |

| 308.00 | NE | VA |

| 297.00 | NE | WA |

| 126.00 | NH | FL |

| 216.00 | NH | KS |

| 117.00 | NH | KY |

| 126.00 | NH | MI |

| 389.00 | NH | MN |

| 364.00 | NH | PA |

| 173.00 | NH | VA |

| 224.00 | NH | WA |

| 173.00 | NM | FL |

| 261.00 | NM | KS |

| 353.00 | NM | KY |

| 232.00 | NM | MI |

| 294.00 | NM | MN |

| 104.00 | NM | PA |

| 332.00 | NM | VA |

| 241.00 | NM | WA |

| 307.00 | NY | FL |

| 180.00 | NY | KS |

| 231.00 | NY | KY |

| 369.00 | NY | MI |

| 338.00 | NY | MN |

| 265.00 | NY | PA |

| 332.00 | NY | VA |

| 355.00 | NY | WA |

| 311.00 | PA | FL |

| 127.00 | PA | KS |

| 158.00 | PA | KY |

| 381.00 | PA | MI |

| 150.00 | PA | MN |

| 271.00 | PA | PA |

| 218.00 | PA | VA |

| 307.00 | PA | WA |

| 141.00 | RI | FL |

| 219.00 | RI | KS |

| 339.00 | RI | KY |

| 121.00 | RI | MI |

| 143.00 | RI | MN |

| 277.00 | RI | PA |

| 281.00 | RI | VA |

| 323.00 | RI | WA |

| 145.00 | SD | FL |

| 298.00 | SD | KS |

| 201.00 | SD | KY |

| 361.00 | SD | MI |

| 142.00 | SD | MN |

| 357.00 | SD | PA |

| 210.00 | SD | VA |

| 335.00 | SD | WA |

| 128.00 | TX | FL |

| 115.00 | TX | KS |

| 104.00 | TX | KY |

| 124.00 | TX | MI |

| 282.00 | TX | MN |

| 337.00 | TX | PA |

| 126.00 | TX | VA |

| 340.00 | TX | WA |

| 374.00 | UT | FL |

| 264.00 | UT | KS |

| 363.00 | UT | KY |

| 249.00 | UT | MI |

| 236.00 | UT | MN |

| 320.00 | UT | PA |

| 203.00 | UT | VA |

| 215.00 | UT | WA |

| 261.00 | VT | FL |

| 274.00 | VT | KS |

| 163.00 | VT | KY |

| 100.00 | VT | MI |

| 177.00 | VT | MN |

| 326.00 | VT | PA |

| 224.00 | VT | VA |

| 184.00 | VT | WA |

| 215.00 | WA | FL |

| 341.00 | WA | KS |

| 213.00 | WA | KY |

| 397.00 | WA | MI |

| 382.00 | WA | MN |

| 246.00 | WA | PA |

| 362.00 | WA | VA |

| 242.00 | WA | WA |

| 156.00 | WV | FL |

| 162.00 | WV | KS |

| 268.00 | WV | KY |

| 167.00 | WV | MI |

| 391.00 | WV | MN |

| 322.00 | WV | PA |

| 244.00 | WV | VA |

| 392.00 | WV | WA |

| 136.00 | WY | FL |

| 328.00 | WY | KS |

| 274.00 | WY | KY |

| 365.00 | WY | MI |

| 138.00 | WY | MN |

| 238.00 | WY | PA |

| 290.00 | WY | VA |

| 120.00 | WY | WA |

+--------+----------------+----------------+

217 rows in set (0.12 sec)

mysql> #Question: Show the total cost of products for each supplier.

mysql> CREATE INDEX cost\_idx ON supplier(name(4));

Query OK, 0 rows affected (0.04 sec)

Records: 0 Duplicates: 0 Warnings: 0

mysql> SELECT supplier.name AS 'Supplier Name',

-> product.name AS 'Product Name',

-> SUM(price1) AS 'Total cost of products'

-> FROM supplier

-> JOIN sales\_fact ON supplier.supplierSK = sales\_fact.supplierSK\_FK

-> JOIN product ON product.productSK = sales\_fact.supplierSK\_FK

-> WHERE supplier.name IS NOT null

-> GROUP BY 1;

+-------------------------------+---------------------------------+------------------------+

| Supplier Name | Product Name | Total cost of products |

+-------------------------------+---------------------------------+------------------------+

| Afg Industries Inc. | Bandage Manufacturing Equip | 5254036.49 |

| American General Ventures Inc | Chalmers Polishing Equipment | 6932745.99 |

| Black Hills Corporation | Defeated Tray Supplies | 5213020.10 |

| Dollar General Corporation | Enhanced Covers | 2756478.59 |

| Fedders Corporation | Just Paper Supplies | 3075449.91 |

| First Bancshares Inc Mo | Pervasively Manufacturing Equip | 6471765.29 |

| Immunex Corporation | Significants Freezing Chemicals | 1108081.61 |

| Saurer Gruppe Holding Ag | Suing Manufacturing Equip | 1007714.40 |

| Sinclair Broadcast Group Inc. | Tailor Jacks | 3830147.41 |

+-------------------------------+---------------------------------+------------------------+

9 rows in set (0.23 sec)

mysql> notee