Query 1

|cust ||prod ||1\_min\_quant ||2\_max\_quant |

|Bloom ||Pepsi ||94 ||4232 |

|Knuth ||Bread ||1013 ||4167 |

|Emily ||Pepsi ||538 ||4531 |

|Emily ||Fruits ||111 ||4369 |

|Helen ||Milk ||77 ||4429 |

|Emily ||Soap ||70 ||4081 |

|Bloom ||Eggs ||559 ||4177 |

|Bloom ||Yogurt ||17 ||4004 |

|Helen ||Pepsi ||1407 ||3891 |

|Emily ||Bread ||42 ||2565 |

|Sam ||Cookies ||132 ||3376 |

|Knuth ||Milk ||58 ||1088 |

|Helen ||Coke ||668 ||3840 |

|Emily ||Butter ||212 ||3840 |

|Emily ||Yogurt ||557 ||3765 |

|Sam ||Soap ||165 ||3260 |

|Knuth ||Coke ||211 ||4672 |

|Sam ||Milk ||385 ||3434 |

|Helen ||Yogurt ||787 ||4001 |

|Knuth ||Pepsi ||277 ||4689 |

|Knuth ||Eggs ||326 ||4313 |

|Knuth ||Yogurt ||301 ||3705 |

|Helen ||Fruits ||268 ||2811 |

|Helen ||Cookies ||1080 ||1965 |

|Knuth ||Fruits ||24 ||3939 |

|Emily ||Cookies ||173 ||4925 |

|Bloom ||Coke ||279 ||3640 |

|Helen ||Soap ||712 ||4107 |

|Knuth ||Soap ||436 ||3063 |

|Knuth ||Cookies ||488 ||4237 |

|Emily ||Milk ||26 ||3839 |

|Bloom ||Soap ||270 ||4364 |

|Emily ||Eggs ||128 ||4689 |

|Bloom ||Milk ||553 ||4616 |

|Sam ||Yogurt ||363 ||4564 |

|Sam ||Fruits ||1311 ||4738 |

|Sam ||Butter ||673 ||4453 |

|Bloom ||Fruits ||26 ||4094 |

|Helen ||Eggs ||813 ||3200 |

|Sam ||Pepsi ||160 ||4797 |

|Helen ||Butter ||163 ||4364 |

|Helen ||Bread ||389 ||4855 |

|Bloom ||Butter ||1054 ||3718 |

|Sam ||Bread ||93 ||3187 |

|Sam ||Eggs ||964 ||4610 |

|Knuth ||Butter ||156 ||2232 |

|Bloom ||Cookies ||796 ||4546 |

|Sam ||Coke ||142 ||2819 |

|Emily ||Coke ||81 ||4258 |

|Bloom ||Bread ||256 ||3792 |

Query 2

|cust ||prod ||1\_min\_quant ||2\_max\_quant |

|Bloom ||Pepsi ||2367 ||4232 |

|Knuth ||Bread ||0 ||0 |

|Emily ||Pepsi ||1682 ||0 |

|Emily ||Fruits ||0 ||3743 |

|Helen ||Milk ||1457 ||2422 |

|Emily ||Soap ||0 ||3901 |

|Bloom ||Eggs ||0 ||0 |

|Bloom ||Yogurt ||1203 ||3172 |

|Helen ||Pepsi ||1983 ||0 |

|Emily ||Bread ||232 ||2565 |

|Sam ||Cookies ||0 ||0 |

|Knuth ||Milk ||58 ||0 |

|Helen ||Coke ||668 ||0 |

|Emily ||Butter ||2826 ||0 |

|Emily ||Yogurt ||0 ||0 |

|Sam ||Soap ||165 ||0 |

|Knuth ||Coke ||0 ||211 |

|Sam ||Milk ||811 ||1132 |

|Helen ||Yogurt ||0 ||0 |

|Knuth ||Pepsi ||2064 ||277 |

|Knuth ||Eggs ||0 ||2353 |

|Knuth ||Yogurt ||2167 ||3705 |

|Helen ||Fruits ||0 ||0 |

|Helen ||Cookies ||0 ||0 |

|Knuth ||Fruits ||0 ||3756 |

|Emily ||Cookies ||2685 ||0 |

|Bloom ||Coke ||0 ||3654 |

|Helen ||Soap ||0 ||925 |

|Knuth ||Soap ||1098 ||4307 |

|Knuth ||Cookies ||0 ||1367 |

|Emily ||Milk ||0 ||0 |

|Bloom ||Soap ||0 ||0 |

|Emily ||Eggs ||4658 ||0 |

|Bloom ||Milk ||1794 ||2004 |

|Sam ||Yogurt ||1943 ||0 |

|Sam ||Fruits ||0 ||0 |

|Sam ||Butter ||0 ||0 |

|Bloom ||Fruits ||26 ||0 |

|Helen ||Eggs ||0 ||0 |

|Sam ||Pepsi ||3368 ||3008 |

|Helen ||Butter ||4969 ||2086 |

|Helen ||Bread ||0 ||0 |

|Bloom ||Butter ||0 ||0 |

|Sam ||Bread ||0 ||3809 |

|Sam ||Eggs ||1744 ||0 |

|Knuth ||Butter ||0 ||0 |

|Bloom ||Cookies ||0 ||0 |

|Sam ||Coke ||0 ||0 |

|Emily ||Coke ||4258 ||0 |

|Bloom ||Bread ||0 ||0 |

Query 3

|prod ||1\_avg\_quant ||2\_avg\_quant ||3\_avg\_quant |

|Pepsi ||0 ||1983.0 ||0 |

|Bread ||0 ||0 ||492.0 |

|Fruits ||0 ||776.0 ||0 |

|Milk ||0 ||0 ||1450.5 |

|Soap ||1098.0 ||165.0 ||0 |

|Eggs ||0 ||0 ||1744.0 |

|Yogurt ||0 ||0 ||1943.0 |

|Cookies ||3654.0 ||0 ||0 |

|Coke ||0 ||4258.0 ||0 |

|Butter ||0 ||2826.0 ||0 |

Query 4

|cust ||1\_avg\_quant ||1\_sum\_quant ||2\_count\_quant |

|Bloom ||0 ||0.0 ||2 |

|Knuth ||2353.0 ||2353.0 ||2 |

|Emily ||4658.0 ||4658.0 ||1 |

|Helen ||0 ||0.0 ||1 |

|Sam ||1744.0 ||1744.0 ||2 |

Query 5

|cust ||prod ||1\_year ||1\_month ||1\_day ||1\_state ||1\_quant |

|Bloom ||Pepsi ||1998 ||11 ||30 ||NJ ||4515 |

|Knuth ||Bread ||1998 ||3 ||27 ||CT ||4372 |

|Emily ||Pepsi ||1995 ||5 ||11 ||NY ||4901 |

|Emily ||Fruits ||1992 ||8 ||29 ||PA ||4731 |

|Helen ||Milk ||1996 ||2 ||28 ||PA ||4794 |

|Emily ||Soap ||1993 ||11 ||15 ||CT ||4106 |

|Bloom ||Eggs ||1994 ||1 ||3 ||NJ ||4972 |

|Bloom ||Yogurt ||1995 ||4 ||28 ||NY ||4043 |

|Helen ||Pepsi ||1998 ||1 ||31 ||NJ ||4412 |

|Emily ||Bread ||1995 ||4 ||2 ||NJ ||4467 |

|Sam ||Cookies ||1992 ||11 ||17 ||PA ||3725 |

|Knuth ||Milk ||1996 ||4 ||13 ||NY ||2424 |

|Helen ||Coke ||1992 ||2 ||10 ||NJ ||4237 |

|Emily ||Butter ||1990 ||7 ||25 ||PA ||4008 |

|Emily ||Yogurt ||1995 ||3 ||28 ||NY ||3822 |

|Sam ||Soap ||1993 ||4 ||6 ||PA ||4954 |

|Knuth ||Coke ||1993 ||2 ||23 ||PA ||4757 |

|Sam ||Milk ||1996 ||12 ||19 ||NJ ||4522 |

|Helen ||Yogurt ||1997 ||8 ||8 ||NY ||4909 |

|Knuth ||Pepsi ||1994 ||9 ||11 ||NY ||4942 |

|Knuth ||Eggs ||1994 ||11 ||2 ||CT ||4317 |

|Knuth ||Yogurt ||1997 ||3 ||14 ||PA ||4361 |

|Helen ||Fruits ||1996 ||12 ||25 ||CT ||4015 |

|Helen ||Cookies ||1992 ||8 ||28 ||NY ||3494 |

|Knuth ||Fruits ||1993 ||2 ||1 ||PA ||4475 |

|Emily ||Cookies ||1997 ||12 ||18 ||PA ||4935 |

|Bloom ||Coke ||1991 ||7 ||13 ||PA ||3654 |

|Helen ||Soap ||1993 ||1 ||10 ||NJ ||4702 |

|Knuth ||Soap ||1991 ||12 ||16 ||NY ||4307 |

|Knuth ||Cookies ||1993 ||7 ||17 ||CT ||4994 |

|Emily ||Milk ||1992 ||11 ||12 ||NY ||4986 |

|Bloom ||Soap ||1995 ||1 ||6 ||CT ||4623 |

|Emily ||Eggs ||1997 ||8 ||18 ||NY ||4754 |

|Bloom ||Milk ||1998 ||10 ||15 ||CT ||4870 |

|Sam ||Yogurt ||1991 ||6 ||22 ||CT ||4728 |

|Sam ||Fruits ||1996 ||9 ||15 ||NJ ||4793 |

|Sam ||Butter ||1996 ||9 ||30 ||NY ||4893 |

|Bloom ||Fruits ||1992 ||5 ||5 ||PA ||4444 |

|Helen ||Eggs ||1992 ||10 ||21 ||CT ||4162 |

|Sam ||Pepsi ||1992 ||12 ||19 ||CT ||4865 |

|Helen ||Butter ||1991 ||6 ||4 ||NY ||4969 |

|Helen ||Bread ||1998 ||5 ||30 ||NY ||4901 |

|Bloom ||Butter ||1990 ||10 ||9 ||CT ||4279 |

|Sam ||Bread ||1991 ||9 ||26 ||NJ ||3809 |

|Sam ||Eggs ||1997 ||11 ||7 ||PA ||4674 |

|Knuth ||Butter ||1998 ||10 ||8 ||PA ||2852 |

|Bloom ||Cookies ||1992 ||10 ||8 ||NY ||4570 |

|Sam ||Coke ||1994 ||8 ||24 ||PA ||3053 |

|Emily ||Coke ||1992 ||8 ||25 ||CT ||4379 |

|Bloom ||Bread ||1990 ||2 ||25 ||NJ ||4778 |

Query 6

|cust ||prod ||1\_count\_quant ||2\_count\_quant |

|Bloom ||Pepsi ||0 ||0 |

|Knuth ||Bread ||1 ||0 |

|Emily ||Pepsi ||0 ||0 |

|Emily ||Fruits ||0 ||0 |

|Helen ||Milk ||0 ||0 |

|Emily ||Soap ||0 ||0 |

|Bloom ||Eggs ||0 ||0 |

|Bloom ||Yogurt ||0 ||0 |

|Helen ||Pepsi ||0 ||0 |

|Emily ||Bread ||0 ||0 |

|Sam ||Cookies ||0 ||0 |

|Knuth ||Milk ||0 ||0 |

|Helen ||Coke ||0 ||0 |

|Emily ||Butter ||0 ||0 |

|Emily ||Yogurt ||0 ||0 |

|Sam ||Soap ||0 ||1 |

|Knuth ||Coke ||0 ||1 |

|Sam ||Milk ||0 ||0 |

|Helen ||Yogurt ||0 ||1 |

|Knuth ||Pepsi ||0 ||0 |

|Knuth ||Eggs ||1 ||0 |

|Knuth ||Yogurt ||1 ||0 |

|Helen ||Fruits ||1 ||0 |

|Helen ||Cookies ||0 ||0 |

|Knuth ||Fruits ||0 ||0 |

|Emily ||Cookies ||0 ||0 |

|Bloom ||Coke ||0 ||0 |

|Helen ||Soap ||0 ||1 |

|Knuth ||Soap ||0 ||0 |

|Knuth ||Cookies ||0 ||0 |

|Emily ||Milk ||0 ||0 |

|Bloom ||Soap ||0 ||0 |

|Emily ||Eggs ||0 ||2 |

|Bloom ||Milk ||1 ||0 |

|Sam ||Yogurt ||0 ||0 |

|Sam ||Fruits ||0 ||0 |

|Sam ||Butter ||0 ||0 |

|Bloom ||Fruits ||0 ||0 |

|Helen ||Eggs ||0 ||0 |

|Sam ||Pepsi ||0 ||0 |

|Helen ||Butter ||0 ||1 |

|Helen ||Bread ||0 ||0 |

|Bloom ||Butter ||0 ||0 |

|Sam ||Bread ||0 ||0 |

|Sam ||Eggs ||0 ||0 |

|Knuth ||Butter ||0 ||0 |

|Bloom ||Cookies ||0 ||0 |

|Sam ||Coke ||0 ||0 |

|Emily ||Coke ||0 ||0 |

|Bloom ||Bread ||1 ||1 |