**CSCI 8340** DBMS II

Term Project Final Report

Simulation of implementing a join algorithm in a distributed database environment

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Data file: Tables (or fragments) at each site.

(Table, block, record)

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| --- | --- | --- | --- |
| Block# | Account\_NYC (55 tuples in 6 blocks) | | |
| ACCOUNT\_NUMBER | BRANCH\_NAME | BALANCE |
| 0 | A10101 | Downtown | 500 |
| A10102 | Chinatown | 400 |
| A10201 | Aksarben | 900 |
| A10215 | Mianus | 700 |
| A10217 | Aksarben | 750 |
| A10352 | Redwood | 700 |
| A10305 | Chinatown | 350 |
| A10401 | Downtown | 600 |
| A10302 | Chinatown | 550 |
| A10501 | Aksarben | 800 |
| 1 | A10615 | Mianus | 300 |
| A10717 | Aksarben | 650 |
| A10822 | Redwood | 300 |
| A10405 | Aksarben | 450 |
| A10301 | Downtown | 530 |
| A10502 | Chinatown | 650 |
| A10701 | Aksarben | 700 |
| A10815 | Mianus | 600 |
| A10817 | Aksarben | 350 |
| A10622 | Redwood | 500 |
| 2 | A10805 | Chinatown | 650 |
| A10403 | Downtown | 800 |
| A10902 | Chinatown | 950 |
| A10551 | Aksarben | 360 |
| A10635 | Mianus | 380 |
| A10787 | Aksarben | 250 |
| A10812 | Redwood | 200 |
| A10495 | Aksarben | 150 |
| A10132 | Downtown | 300 |
| A10152 | Chinatown | 490 |
| 3 | A10208 | Aksarben | 950 |
| A10230 | Mianus | 710 |
| A10117 | Aksarben | 450 |
| A10262 | Redwood | 720 |
| A10315 | Chinatown | 450 |
| A10408 | Downtown | 630 |
| A10312 | Chinatown | 250 |
| A10553 | Aksarben | 850 |
| A10605 | Mianus | 330 |
| A10797 | Aksarben | 660 |
| 4 | A10824 | Redwood | 390 |
| A10425 | Aksarben | 410 |
| A10306 | Downtown | 930 |
| A10503 | Chinatown | 750 |
| A10811 | Aksarben | 600 |
| A10835 | Mianus | 800 |
| A10867 | Aksarben | 950 |
| A10628 | Redwood | 400 |
| A10855 | Chinatown | 350 |
| A10431 | Downtown | 200 |
| 5 | A10922 | Chinatown | 150 |
| A10561 | Aksarben | 260 |
| A10653 | Mianus | 480 |
| A10724 | Aksarben | 350 |
| A10821 | Redwood | 500 |

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| Block# | Branch\_NYC (7 tuples in 1 blocks) | | |
| BRANCH\_NAME | BRANCH\_CITY | ASSETS |
| 0 | Aksarben | OMA | 7100000 |
| Downtown | OMA | 9000000 |
| Mianus | SFO | 400000 |
| North Town | OMA | 3700000 |
| Chinatown | SFO | 1700000 |
| Pownal | NYC | 300000 |
| Redwood | HOU | 2100000 |

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| --- | --- | --- | --- |
| Block# | Depositor\_NYC (55 tuples in 4 blocks) | | |
| CUSTOMER\_NAME | ACCOUNT\_NUMBER | |
| 0 | Hayes | A10102 |  |
| Johnson | A10102 |  |
| Johnson | A10201 |  |
| Jones | A10217 |  |
| Lindsay | A10352 |  |
| Smith | A10215 |  |
| Turner | A10305 |  |
| Hunter | A10822 |  |
| Landon | A10408 |  |
| Levi | A10405 |  |
| Wyatt | A10605 |  |
| Jaxon | A10302 |  |
| Johnson | A10501 |  |
| Jones | A10902 |  |
| Lindsay | A10405 |  |
| 1 | Caleb | A10495 |  |
| Turner | A10817 |  |
| Hunter | A10215 |  |
| Landon | A10724 |  |
| Andrew | A10132 |  |
| Noah | A10502 |  |
| Liam | A10701 |  |
| Jacob | A10815 |  |
| Ethan | A10622 |  |
| Alexander | A10805 |  |
| Daniel | A10215 |  |
| Jayden | A10902 |  |
| Logan | A10812 |  |
| Sebastian | A10302 |  |
| Carter | A10553 |  |
| 2 | Wyatt | A10797 |  |
| Oliver | A10615 |  |
| Anthony | A10824 |  |
| David | A10117 |  |
| Gabriel | A10230 |  |
| Samuel | A10495 |  |
| Fiona | A10208 |  |
| Luke | A10312 |  |
| Elijah | A10306 |  |
| Michael | A10922 |  |
| Nick | A10501 |  |
| Aiden | A10401 |  |
| Mason | A10822 |  |
| James | A10408 |  |
| Matthew | A10405 |  |
| 3 | Jacob | A10605 |  |
| Christopher | A10302 |  |
| Isaiah | A10201 |  |
| Tom | A10217 |  |
| Dylan | A10605 |  |
| Caleb | A10867 |  |
| Turner | A10403 |  |
| Hunter | A10635 |  |
| Landon | A10902 |  |
| Levi | A10117 |  |

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| Block# | Branch\_SFO (7 tuples in 1 blocks) | | |
| BRANCH\_NAME | BRANCH\_CITY | ASSETS |
| 0 | Aksarben | OMA | 7100000 |
| Downtown | OMA | 9000000 |
| Mianus | SFO | 400000 |
| North Town | OMA | 3700000 |
| Chinatown | SFO | 1700000 |
| Pownal | NYC | 300000 |
| Redwood | HOU | 2100000 |

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| --- | --- | --- | --- |
| Block# | Frag\_Account\_OMA (27 tuples in 3 blocks) | | |
| ACCOUNT\_NUMBER | BRANCH\_NAME | BALANCE |
| 0 | A10101 | Downtown | 500 |
| A10201 | Aksarben | 900 |
| A10217 | Aksarben | 750 |
| A10401 | Downtown | 600 |
| A10501 | Aksarben | 800 |
| A10717 | Aksarben | 650 |
| A10405 | Aksarben | 450 |
| A10301 | Downtown | 530 |
| A10701 | Aksarben | 700 |
| A10817 | Aksarben | 350 |
| 1 | A10403 | Downtown | 800 |
| A10551 | Aksarben | 360 |
| A10787 | Aksarben | 250 |
| A10495 | Aksarben | 150 |
| A10132 | Downtown | 300 |
| A10208 | Aksarben | 950 |
| A10117 | Aksarben | 450 |
| A10408 | Downtown | 630 |
| A10553 | Aksarben | 850 |
| A10797 | Aksarben | 660 |
| 2 | A10425 | Aksarben | 410 |
| A10306 | Downtown | 930 |
| A10811 | Aksarben | 600 |
| A10867 | Aksarben | 950 |
| A10431 | Downtown | 200 |
| A10561 | Aksarben | 260 |
| A10724 | Aksarben | 350 |

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| --- | --- | --- | --- |
| Block# | Frag\_Account\_SFO (20 tuples in 2 blocks) | | |
| ACCOUNT\_NUMBER | BRANCH\_NAME | BALANCE |
| 0 | A10102 | Chinatown | 400 |
| A10215 | Mianus | 700 |
| A10305 | Chinatown | 350 |
| A10302 | Chinatown | 550 |
| A10615 | Mianus | 300 |
| A10502 | Chinatown | 650 |
| A10815 | Mianus | 600 |
| A10805 | Chinatown | 650 |
| A10902 | Chinatown | 950 |
| A10635 | Mianus | 380 |
| 1 | A10152 | Chinatown | 490 |
| A10230 | Mianus | 710 |
| A10315 | Chinatown | 450 |
| A10312 | Chinatown | 250 |
| A10605 | Mianus | 330 |
| A10503 | Chinatown | 750 |
| A10835 | Mianus | 800 |
| A10855 | Chinatown | 350 |
| A10922 | Chinatown | 150 |
| A10653 | Mianus | 480 |

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| --- | --- | --- |
| Blocks# | Frag\_Depositor\_OMA (26 tuples in 2 blocks) | |
| CUSTOMER\_NAME | ACCOUNT\_NUMBER |
| 0 | Levi | A10117 |
| David | A10117 |
| Andrew | A10132 |
| Isaiah | A10201 |
| Johnson | A10201 |
| Fiona | A10208 |
| Jones | A10217 |
| Tom | A10217 |
| Elijah | A10306 |
| Aiden | A10401 |
| Turner | A10403 |
| Levi | A10405 |
| Lindsay | A10405 |
| Matthew | A10405 |
| Landon | A10408 |
| 1 | James | A10408 |
| Samuel | A10495 |
| Caleb | A10495 |
| Johnson | A10501 |
| Nick | A10501 |
| Carter | A10553 |
| Liam | A10701 |
| Landon | A10724 |
| Wyatt | A10797 |
| Turner | A10817 |
| Caleb | A10867 |

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| Block# | Customer\_HOU (60 tuples in 8 blocks) | | |
| CUSTOMER\_NAME | CUSTOMER\_STREET | CUSTOMER\_CITY |
| 0 | Adams | Spring | Pittsfield |
| Brooks | Senator | OMA |
| Curry | North | Rye |
| Glenn | Sand Hill | Woodside |
| Green | Walnut | Stamford |
| Hayes | Main | Harrison |
| Johnson | Alma | Palo Alto |
| Jones | Main | Harrison |
| 1 | Lindsay | Park | Pittsfield |
| Smith | North | Rye |
| Turner | Putnam | Stamford |
| Williams | Nassau | Princeton |
| Fiona | Spring | Pittsfield |
| Lucas | Senator | OMA |
| Tom | North | Rye |
| Nick | Sand Hill | Woodside |
| 2 | Jackson | Walnut | Stamford |
| Noah | Main | Harrison |
| Liam | Alma | Palo Alto |
| Mason | Main | Harrison |
| Elijah | Park | Pittsfield |
| Michael | North | Rye |
| Jacob | Putnam | Stamford |
| Aiden | Nassau | Princeton |
| 3 | Willian | Main | Harrison |
| James | Park | Pittsfield |
| Matthew | North | Rye |
| Alexander | Putnam | Stamford |
| Ethan | Nassau | Princeton |
| Benjamin | Spring | Pittsfield |
| Daniel | Spring | Pittsfield |
| Sebastian | Senator | OMA |
| 4 | Jayden | North | Rye |
| Logan | Sand Hill | Woodside |
| Carter | Walnut | Stamford |
| Oliver | Main | Harrison |
| Anthony | Alma | Palo Alto |
| David | Main | Harrison |
| Joseph | Park | Pittsfield |
| Christopher | North | Rye |
| 5 | Gabriel | Putnam | Stamford |
| Dylan | Nassau | Princeton |
| Samuel | Spring | Pittsfield |
| Luke | Senator | OMA |
| Julian | North | Rye |
| Andrew | Sand Hill | Woodside |
| Grayson | Walnut | Stamford |
| Isaac | Main | Harrison |
| 6 | Owen | Alma | Palo Alto |
| Ryan | Main | Harrison |
| Jaxon | Park | Pittsfield |
| Josiah | North | Rye |
| Christian | Putnam | Stamford |
| Isaiah | Nassau | Princeton |
| Wyatt | Main | Harrison |
| Nathan | Park | Pittsfield |
| 7 | Caleb | North | Rye |
| Hunter | Putnam | Stamford |
| landon | Nassau | Princeton |
| Levi | Spring | Pittsfield |