Yasser Atiya

Assignment 9

11/22/2016

OptimizationCharts.pdf

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| Static Instructions | | | | | | | | | |
| Optimization | Banner | Cal | Echo | Find | Half | Queens | Square | WC | Average |
| -U | 1 | .996 | 1 | 1 | .944 | 1 | 1 | 1 | .993 |
| -C | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| -B | .988 | .975 | .991 | .957 | 1 | .977 | 1 | .989 | .985 |
| -R | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| -O | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| -D | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| -P | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| -M | 1.02 | 1.04 | 1.03 | 1.021 | 1 | 1.089 | 1 | 1.059 | 1.032 |
| -E | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| -F | .953 | .92 | .939 | .914 | .944 | .972 | .95 | .933 | .94 |
| |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | Dynamic Instructions | | | | | | | | | | | Optimization | Banner | Cal | Echo | Find | Half | Queens | Square | WC | Average | | -U | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | -C | .988 | .979 | 1 | 1 | 1 | 1 | 1 | .999 | .995 | | -B | .991 | .98 | .982 | 1 | 1 | .97 | 1 | .983 | .988 | | -R | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | -O | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | -D | 1 | 1 | .982 | 1 | 1 | 1 | 1 | 1 | .997 | | -P | .999 | .999 | 1 | 1 | 1 | 1 | 1 | 1 | .999 | | -M | 1.002 | 1.001 | 1.035 | 1.005 | 1 | 1.044 | 1 | 1.001 | 1.011 | | -E | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | -F | .991 | .909 | .947 | .984 | .941 | .994 | .95 | .973 | .961 |   Memory References | | | | | | | | | |
| Optimization | Banner | Cal | Echo | Find | Half | Queens | Square | WC | Average |
| -U | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| -C | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| -B | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| -R | .119 | .191 | .358 | .333 | .437 | .253 | 1 | .494 | .398 |
| -O | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| -D | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| -P | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| -M | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| -E | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| -F | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |

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| Static Instructions | | | | | | | | | |
| Optimization | Banner | Cal | Echo | Find | Half | Queens | Square | WC | Average |
| -U | 1 | .996 | 1 | 1 | .944 | 1 | 1 | 1 | .993 |
| -UC | 1 | .996 | 1 | 1 | .944 | 1 | 1 | 1 | .993 |
| -UCB | .988 | .971 | .991 | .957 | .944 | .977 | 1 | .989 | .977 |
| - UCBR | .988 | .971 | .991 | .957 | .944 | .977 | 1 | .989 | .977 |
| - UCBRO | .988 | .971 | .991 | .957 | .944 | .977 | 1 | .989 | .977 |
| - UCBROD | .853 | .841 | .852 | .893 | .833 | .798 | 1 | .891 | .87 |
| - UCBRODP | .818 | .814 | .834 | .872 | .805 | .765 | 1 | .881 | .849 |
| -UCBBRODPM | .837 | .85 | .843 | .892 | .805 | .854 | 1 | .951 | .879 |
| - UCBRODPME | .826 | .792 | .808 | .836 | .805 | .748 | 1 | .891 | .838 |
| -UCBRODPMEF | .779 | .699 | .747 | .765 | .75 | .692 | .95 | .818 | .775 |

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| Dynamic Instructions | | | | | | | | | |
| Optimization | Banner | Cal | Echo | Find | Half | Queens | Square | WC | Average |
| -U | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| -UC | .988 | .979 | 1 | 1 | 1 | 1 | 1 | .983 | .993 |
| -UCB | .98 | .971 | .982 | .953 | 1 | .97 | 1 | .983 | .98 |
| - UCBR | .98 | .971 | .982 | .953 | 1.117 | .97 | 1 | .983 | .995 |
| - UCBRO | .98 | .971 | .982 | .953 | 1.117 | .97 | 1 | .983 | .995 |
| - UCBROD | .744 | .86 | .796 | .843 | .888 | .802 | 1 | .85 | .848 |
| - UCBRODP | .736 | .817 | .787 | .792 | .861 | .765 | 1 | .824 | .823 |
| -UCBBRODPM | .738 | .818 | .832 | .802 | .861 | .812 | 1 | .824 | .836 |
| - UCBRODPME | .727 | .795 | .725 | .651 | .861 | .64 | 1 | .737 | .767 |
| -UCBRODPMEF | .719 | .703 | .672 | .583 | .852 | .596 | .95 | .656 | .716 |

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| Memory References | | | | | | | | | |
| Optimization | Banner | Cal | Echo | Find | Half | Queens | Square | WC | Average |
| -U | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| -UC | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| -UCB | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| - UCBR | .119 | .191 | .358 | .33 | .437 | .253 | 1 | .494 | .398 |
| - UCBRO | .119 | .191 | .358 | .33 | .437 | .253 | 1 | .494 | .398 |
| - UCBROD | .119 | .191 | .358 | .33 | .437 | .253 | 1 | .494 | .398 |
| - UCBRODP | .119 | .191 | .358 | .33 | .437 | .253 | 1 | .494 | .398 |
| -UCBBRODPM | .119 | .191 | .358 | .19 | .437 | .253 | 1 | .494 | .38 |
| - UCBRODPME | .119 | .191 | .358 | .19 | .437 | .253 | 1 | .494 | .38 |
| -UCBRODPMEF | .119 | .191 | .358 | .19 | .437 | .253 | 1 | .494 | .38 |