

Nick Wurzer  
V00958568  
CSC 230-A01  
Mike Zastre  
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### Mars Statistics for Assignment 4 Part E

|   | Test Case A       | Test Case B      | Test Case C        |
|---|-------------------|------------------|--------------------|
| File 1                                  | integers-10-6     | integers-40-91   | integers-200-150   |
| File 2                                  | integers-10-21    | integers-40-101  | integers-200-12345 |
|   |                   |                  |                    |
| <b>Instructions Statistics</b>          |                   |                  |                    |
| ALU                                     | 280(45%)          | 825(40%)         | 3705(39%)          |
| Jump                                    | 15(2%)            | 15(1%)           | 15(0%)             |
| Branch                                  | 94(15%)           | 364(18%)         | 1804(19%)          |
| Memory                                  | 141(23%)          | 471(23%)         | 2231(23%)          |
| Other                                   | 96(15%)           | 370(18%)         | 1802(19%)          |
|   |                   |                  |                    |
| <b>BHT Prediction</b>                   |                   |                  |                    |
| Best                                    | 100% (index 14)   | 100% (index 14)  | 100% (index 14)    |
| Median                                  | 85% (index 1)     | 96.25% (index 1) | 99.25% (index 1)   |
| Worst                                   | 66.67% (index 13) | 87.5% (index 3)  | 93.75% (index 3)   |
|   |                   |                  |                    |
| <b>Cache(8 lines, 8 words per line)</b> |                   |                  |                    |
| Direct Mapping                          | 60%               | 54%              | 51%                |
| 2-way set associative                   | 80%               | 78%              | 78%                |
| 4-way set associative                   | 94%               | 90%              | 91%                |
| Fully associative                       | 94%               | 90%              | 91%                |
|   |                   |                  |                    |