**Project – 2**

**vinod sake**

**Problem 1:**

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| **Problem 1 - IP Stride prefetcher** |  |  |  |
| **Trace** | **No** | **Next Line** | **IP Stride** |
| astar\_163B\_50M | 0.331881 | 0.333785 | 0.334338 |
| bwaves\_1861B\_50M | 0.694852 | 0.875776 | 0.864842 |
| bzip2\_183B\_50M | 0.83362 | 0.850989 | 0.841814 |
| gcc\_13B\_50M | 0.18919 | 0.236366 | 0.219461 |
| GemsFDTD\_109B\_50M | 0.439453 | 0.716759 | 0.670763 |
| lbm\_94B\_50M | 0.494307 | 0.547936 | 0.544406 |
| leslie3d\_1116B\_50M | 0.707987 | 1.01335 | 0.948914 |
| libquantum\_1210B\_50M | 0.235601 | 0.362938 | 0.356663 |
| mcf\_46B\_50M | 0.0878508 | 0.102862 | 0.0878568 |
| milc\_360B\_50M | 0.592034 | 0.652178 | 0.643455 |
| omnetpp\_340B\_50M | 0.242286 | 0.254426 | 0.243055 |
| soplex\_66B\_50M | 0.339286 | 0.392528 | 0.387544 |
| sphinx3\_2520B\_50M | 0.737687 | 1.09873 | 0.970126 |
| wrf\_1212B\_50M | 0.544402 | 0.553789 | 0.544749 |
| xalancbmk\_748B\_50M | 0.399627 | 0.401525 | 0.400599 |
| **Arithmetic Mean** | **0.458004253** | **0.5595958** | **0.537239053** |

**Problem 2:**

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| **Problem 2 - SRRIP** |  |  |
| **Trace** | **LRU** | **SRRIP** |
| astar\_163B\_50M | 0.331881 | 0.332212 |
| bwaves\_1861B\_50M | 0.694852 | 0.695276 |
| bzip2\_183B\_50M | 0.83362 | 0.82822 |
| gcc\_13B\_50M | 0.18919 | 0.188458 |
| GemsFDTD\_109B\_50M | 0.439453 | 0.439709 |
| lbm\_94B\_50M | 0.494307 | 0.494282 |
| leslie3d\_1116B\_50M | 0.707987 | 0.706599 |
| libquantum\_1210B\_50M | 0.235601 | 0.23696 |
| mcf\_46B\_50M | 0.0878508 | 0.0893176 |
| milc\_360B\_50M | 0.592034 | 0.588152 |
| omnetpp\_340B\_50M | 0.242286 | 0.242942 |
| soplex\_66B\_50M | 0.339286 | 0.346165 |
| sphinx3\_2520B\_50M | 0.737687 | 0.762958 |
| wrf\_1212B\_50M | 0.544402 | 0.544402 |
| xalancbmk\_748B\_50M | 0.399627 | 0.398401 |
| **Arithmetic Mean** | **0.458004253** | **0.4596036** |

**Problem 3:**

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| **Problem 3 - BRRIP** |  |  |
| **Trace** | **LRU** | **BRRIP** |
| astar\_163B\_50M | 0.331881 | 0.331531 |
| bwaves\_1861B\_50M | 0.694852 | 0.699881 |
| bzip2\_183B\_50M | 0.83362 | 0.802481 |
| gcc\_13B\_50M | 0.18919 | 0.191563 |
| GemsFDTD\_109B\_50M | 0.439453 | 0.443561 |
| lbm\_94B\_50M | 0.494307 | 0.515769 |
| leslie3d\_1116B\_50M | 0.707987 | 0.727088 |
| libquantum\_1210B\_50M | 0.235601 | 0.238418 |
| mcf\_46B\_50M | 0.0878508 | 0.0936715 |
| milc\_360B\_50M | 0.592034 | 0.587606 |
| omnetpp\_340B\_50M | 0.242286 | 0.23872 |
| soplex\_66B\_50M | 0.339286 | 0.355193 |
| sphinx3\_2520B\_50M | 0.737687 | 0.867264 |
| wrf\_1212B\_50M | 0.544402 | 0.543057 |
| xalancbmk\_748B\_50M | 0.399627 | 0.391893 |
| **Arithmetic Mean** | **0.458004253** | **0.4685131** |