|  |  |
| --- | --- |
| CPU Cores and Speed (GHz) | Intel(R) Core(TM) i7-10750H CPU @ 2.60GHz 2.59 GHz |
| Available RAM (GB) – check Windows Task Manager | 32.0 GB (31.8 GB usable) |

Experiment A:

Read data set A. Index data based on the “year” into hash table using hash function *f(n)*. Remove “ALL” data for year **2012** only.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Linear probing method | | | Chaining method | | |
| Time | N = 8000  P = 11 | N = 8000  P = 37 | N = 8000  P = 919 | N = 8000  P = 11 | N = 8000  P = 37 | N = 8000  P = 919 |
| Read | 190179000 | 186639100 | 185575500 | 92091800 | 82199600 | 82446400 |
| Remove | 15873500 | 18223400 | 17222600 | 53400 | 113100 | 111400 |
| Write | 12692600 | 13890900 | 13105700 | 10763900 | 12523900 | 11291700 |

Experiment B:

Read data set B. Index data based on the “year” into hash table using hash function *f(n)*. Remove “ALL” data for year **2002** only.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Linear probing method | | | Chaining method | | |
| Time | N = 100000  P = 11 | N = 100000  P = 37 | N = 100000  P = 919 | N = 100000  P = 11 | N = 100000  P = 37 | N = 100000  P = 919 |
| Read | 364166800 | 361713500 | 360877000 | 137526300 | 101920200 | 99040700 |
| Remove | 20708200 | 20962600 | 20958200 | 219900 | 82600 | 107600 |
| Write | 17521700 | 16336600 | 17357200 | 28253700 | 23522600 | 23117400 |

Experiment C:

Read data set C. Index data based on the “Country Code” into hash table using hash function *h(n)*. Remove “ALL” data for countries: **WLF, JOR, CYP, BMU and ZMB**.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Linear probing method | | | Chaining method | | |
| Time | N = 24000  P = 313 | N = 24000  P = 1913 | N = 24000  P = 7919 | N = 24000  P = 313 | N = 24000  P = 1913 | N = 24000  P = 7919 |
| Read | 1997594100 | 1919296600 | 1503395200 | 170726400 | 168581400 | 167190900 |
| Remove | 47297300 | 45411000 | 40228800 | 116000 | 44800 | 64200 |
| Write | 27865500 | 23347900 | 22709500 | 19386000 | 20762500 | 21299500 |

Experiment D:

Read data set D. Index data based on the “Country Name” into hash table using hash function *h(n)*. Remove “ALL” data for countries: **Poland, Morocco, Saudi Arabia, Senegal, Vietnam and “Wallis and Futuna**”.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Linear probing method | | | Chaining method | | |
| Time | N = 100000  P = 313 | N = 100000  P = 1913 | N = 100000  P = 7919 | N = 8000  P = 313 | N = 8000  P = 1913 | N = 8000  P = 7919 |
| Read | 15707171400 | 14464074500 | 13004343800 | 282098700 | 237479600 | 226916700 |
| Remove | 1038444900 | 809508400 | 714581500 | 300500 | 275600 | 275000 |
| Write | 52192300 | 46227400 | 51785900 | 59119700 | 44391700 | 46187600 |