

ChatGPT Prompt:

Prompt 1: [Copy Paste of Description of Problem 1 from the Homework file] . Here is the Java implementation. [Copy Paste of the average_volume java file]

Prompt 2: Traceback (most recent call last):

File "/Users/kevinli/Downloads/mapper.py", line 73, in <module>

main() File "/Users/kevinli/Downloads/mapper.py", line 69, in main

for year, substring, avg in sorted(final_results):

ValueError: not enough values to unpack (expected 3, got 2). Does this also handle bigram results?

Sample Results:

Unigram:

1505,nu,1.00
1507,nu,1.00
1515,nu,1.00
1520,nu,1.00
1524,chi,1.00
1524,nu,1.00
1525,nu,1.00
1541,nu,1.00
1563,chi,1.00
1563,nu,1.00
1564,chi,1.00
1564,nu,1.00
1568,nu,1.14
1572,nu,1.00
1574,nu,1.00
1575,nu,1.00
1579,nu,1.44
1581,nu,1.21
1582,nu,1.00
1584,nu,1.00
1587,nu,1.88
1588,nu,1.00
1589,nu,1.20
1590,nu,1.94
1592,nu,1.33
1593,nu,1.00
1594,nu,1.00
1595,nu,1.83
1597,nu,1.00
1598,nu,1.18
1600,nu,1.00
1602,nu,1.00
1603,nu,1.00
1605,nu,1.00
1606,nu,3.00
1607,nu,1.05
1610,nu,1.00

1611,nu,1.00
1612,nu,1.00
1614,nu,1.00
1618,nu,1.00
1619,nu,1.00
1620,nu,1.40
1621,nu,1.33
1623,nu,2.00
1624,nu,1.17
1625,nu,1.00
1626,nu,1.00
1628,nu,1.00
1629,nu,1.05
1630,nu,1.30
1631,chi,1.00
1631,nu,1.00
1632,nu,1.00
1634,nu,2.67
1635,chi,1.00
1635,nu,1.15
1636,nu,2.00
1637,haw,1.00
1637,nu,1.35
1638,nu,1.07
1640,nu,1.20
1641,nu,1.13
1642,nu,1.46
1643,nu,1.44
1644,nu,1.28
1645,chi,1.00
1645,nu,1.18
1646,nu,1.00
1647,nu,1.23
1648,chi,1.00
1648,nu,1.29
1649,nu,2.00
1650,nu,1.57
1651,nu,1.36
1652,nu,1.28
1653,nu,2.05
1654,nu,1.25
1655,nu,1.47
1656,nu,1.27
1657,nu,1.28
1658,nu,1.36
1659,nu,1.13
1660,nu,1.55
1661,nu,1.27
1662,chi,1.00
1662,nu,1.11
1663,nu,2.40
1664,chi,1.00
1664,nu,1.37
1665,nu,2.17
1666,nu,1.25
1667,chi,1.00
1667,nu,1.53

1668,nu,1.40
1669,nu,1.29
1670,nu,1.51
1671,nu,1.36
1672,chi,1.00
1672,nu,1.47
1673,chi,1.00
1673,nu,1.72
1674,nu,1.22
1675,chi,1.00
1675,nu,1.92
1676,chi,1.00
1676,nu,1.65
1677,chi,1.00
1677,nu,1.59
1678,chi,1.00
1678,nu,1.95
1679,nu,1.49
1680,nu,1.66
1681,nu,1.76
1682,nu,2.21
1683,chi,2.00
1683,nu,2.18
1684,chi,1.00
1684,nu,2.09
1685,chi,1.00
1685,nu,2.11
1686,chi,1.00
1686,nu,2.13
1687,nu,1.58
1688,nu,1.81
1689,nu,2.02
1690,nu,1.97
1691,nu,1.52
1692,chi,1.00
1692,nu,1.77
1693,chi,1.00
1693,nu,2.14
1694,nu,2.23
1695,chi,2.75
1695,nu,2.11
1696,chi,1.00
1696,nu,2.06
1697,chi,1.00
1697,nu,1.52
1698,chi,1.00
1698,nu,2.08
1699,chi,1.67
1699,nu,2.11
1700,chi,1.00
1700,haw,1.00
1700,nu,2.34
1701,nu,2.26
1702,chi,1.00
1702,nu,2.79
1703,chi,1.00
1703,nu,2.66

1704,chi,1.00
1704,nu,3.05
1705,chi,1.00
1705,nu,2.50
1706,chi,1.33
1706,nu,2.96
1707,chi,1.00
1707,nu,2.11
1708,chi,1.00
1708,nu,2.72
1709,chi,1.00
1709,nu,2.30
1710,chi,1.00
1710,nu,2.62
1711,chi,1.18
1711,nu,2.74
1712,chi,1.22
1712,nu,2.01
1713,nu,2.59
1714,chi,1.25
1714,nu,3.23
1715,chi,1.00
1715,nu,2.47
1716,chi,1.67
1716,nu,2.25
1717,chi,2.00
1717,nu,3.41
1718,chi,1.25
1718,nu,2.57
1719,chi,1.00
1719,nu,2.68
1720,chi,1.18
1720,nu,2.97
1721,chi,1.33
1721,nu,2.68
1722,chi,1.00
1722,nu,2.87
1723,chi,2.00
1723,nu,2.68
1724,chi,1.37
1724,nu,2.93
1725,chi,1.00
1725,nu,3.00
1726,chi,1.29
1726,haw,1.00
1726,nu,3.00
1727,chi,1.13
1727,haw,1.00
1727,nu,3.21
1728,chi,1.33
1728,nu,3.67
1729,chi,1.31
1729,nu,3.36
1730,chi,1.18
1730,nu,3.05
1731,chi,1.00
1731,nu,3.53

1732,chi,1.50
1732,nu,3.18
1733,chi,2.00
1733,nu,2.68
1734,chi,1.14
1734,haw,1.00
1734,nu,3.01
1735,chi,1.50
1735,nu,3.00
1736,chi,1.50
1736,nu,3.12
1737,chi,1.11
1737,nu,3.31
1738,chi,1.00
1738,nu,3.56
1739,chi,2.00
1739,nu,4.08
1740,chi,1.00
1740,nu,2.90
1741,chi,1.67
1741,nu,3.18
1742,chi,1.00
1742,nu,3.45
1743,chi,1.00
1743,nu,3.61
1744,chi,1.29
1744,haw,2.00
1744,nu,3.89
1745,chi,1.00
1745,nu,3.90
1746,chi,1.00
1746,nu,3.13
1747,chi,1.00
1747,nu,3.72
1748,chi,1.00
1748,nu,3.50
1749,chi,2.17
1749,nu,4.14
1750,chi,1.00
1750,haw,1.00
1750,nu,3.87
1751,chi,1.17
1751,nu,4.27
1752,chi,2.67
1752,nu,4.19
1753,chi,1.00
1753,haw,2.00
1753,nu,4.30
1754,chi,2.67
1754,nu,5.18
1755,chi,1.00
1755,haw,1.33
1755,nu,5.15
1756,chi,1.33
1756,nu,3.71
1757,chi,1.57
1757,nu,4.20

1758,chi,1.11
1758,nu,4.15
1759,chi,1.25
1759,haw,1.00
1759,nu,4.71
1760,chi,1.00
1760,haw,2.50
1760,nu,5.31
1761,chi,1.17
1761,nu,4.64
1762,chi,1.27
1762,nu,4.61
1763,chi,1.57
1763,nu,4.93
1764,chi,1.11
1764,haw,1.00
1764,nu,5.29
1765,chi,1.92
1765,nu,5.11
1766,chi,1.92
1766,nu,5.50
1767,chi,1.50
1767,haw,1.00
1767,nu,5.53
1768,chi,1.50
1768,nu,6.74
1769,chi,1.40
1769,haw,1.00
1769,nu,5.23
1770,chi,1.40
1770,nu,5.36
1771,chi,1.24
1771,nu,6.13
1772,chi,2.00
1772,nu,5.92
1773,chi,1.85
1773,nu,5.86
1774,chi,1.59
1774,nu,6.42
1775,chi,1.54
1775,nu,5.89
1776,chi,1.59
1776,haw,1.00
1776,nu,6.05
1777,chi,1.96
1777,nu,5.83
1778,chi,1.61
1778,nu,5.22
1779,chi,1.12
1779,nu,5.46
1780,chi,1.11
1780,haw,1.50
1780,nu,5.58
1781,chi,1.52
1781,nu,6.07
1782,chi,1.81
1782,haw,1.00

1782,nu,5.31
1783,chi,1.33
1783,nu,5.64
1784,chi,1.60
1784,haw,1.67
1784,nu,6.25
1785,chi,1.35
1785,haw,3.00
1785,nu,6.20
1786,chi,1.52
1786,nu,5.86
1787,chi,2.92
1787,nu,7.60
1788,chi,2.03
1788,nu,7.50
1789,chi,2.07
1789,haw,2.00
1789,nu,7.56
1790,chi,1.47
1790,nu,7.61
1791,chi,1.75
1791,nu,7.91
1792,chi,1.43
1792,haw,1.00
1792,nu,8.44
1793,chi,1.88
1793,haw,1.00
1793,nu,7.83
1794,chi,1.95
1794,haw,2.00
1794,nu,8.15
1795,chi,1.25
1795,haw,1.33
1795,nu,8.11
1796,chi,1.58
1796,haw,1.00
1796,nu,8.87
1797,chi,1.94
1797,nu,8.01
1798,chi,1.80
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1798,nu,8.49
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1800,chi,1.75
1800,haw,1.00
1800,nu,9.34
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1801,nu,11.98
1802,chi,1.83
1802,haw,1.00
1802,nu,10.34
1803,chi,1.92
1803,haw,1.00
1803,nu,11.56
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1804,nu,12.42

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1805,haw,1.00
1805,nu,11.11
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1806,haw,1.50
1806,nu,12.07
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1807,haw,1.00
1807,nu,13.16
1808,chi,2.36
1808,haw,1.86
1808,nu,12.45
1809,chi,2.83
1809,haw,1.50
1809,nu,12.61
1810,chi,1.76
1810,haw,4.33
1810,nu,13.18
1811,chi,3.89
1811,haw,1.33
1811,nu,14.02
1812,chi,2.51
1812,haw,2.56
1812,nu,12.13
1813,chi,2.22
1813,haw,1.33
1813,nu,11.91
1814,chi,2.84
1814,haw,2.26
1814,nu,13.27
1815,chi,2.54
1815,haw,2.00
1815,nu,13.26
1816,chi,2.53
1816,haw,4.00
1816,nu,13.20
1817,chi,3.30
1817,haw,1.50
1817,nu,14.59
1818,chi,3.22
1818,haw,3.80
1818,nu,15.53
1819,chi,3.06
1819,haw,3.67
1819,nu,14.20
1820,chi,3.17
1820,haw,1.20
1820,nu,15.77
1821,chi,3.38
1821,haw,5.25
1821,nu,15.17
1822,chi,2.91
1822,haw,2.50
1822,nu,17.87
1823,chi,2.91
1823,haw,2.40
1823,nu,18.53

1824,chi,4.23
1824,haw,3.78
1824,nu,19.78
1825,chi,4.07
1825,haw,1.80
1825,nu,20.97
1826,chi,3.12
1826,haw,2.60
1826,nu,17.25
1827,chi,3.77
1827,haw,1.50
1827,nu,19.29
1828,chi,3.65
1828,haw,1.60
1828,nu,18.83
1829,chi,4.20
1829,haw,2.46
1829,nu,18.96
1830,chi,3.38
1830,haw,3.07
1830,nu,22.00
1831,chi,4.02
1831,haw,1.86
1831,nu,20.12
1832,chi,4.27
1832,haw,2.83
1832,nu,20.14
1833,chi,3.31
1833,haw,2.67
1833,nu,22.75
1834,chi,3.64
1834,haw,3.00
1834,nu,20.52
1835,chi,4.98
1835,haw,2.24
1835,nu,22.93
1836,chi,3.64
1836,haw,2.36
1836,nu,22.55
1837,chi,4.17
1837,haw,2.33
1837,nu,22.34
1838,chi,4.34
1838,haw,1.67
1838,nu,22.32
1839,chi,4.42
1839,haw,2.82
1839,nu,22.90
1840,chi,3.84
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1841,chi,4.78
1841,haw,2.80
1841,nu,22.42
1842,chi,3.84
1842,haw,2.91
1842,nu,20.30

1843,chi,3.84
1843,haw,2.62
1843,nu,20.92
1844,chi,3.88
1844,haw,3.21
1844,nu,21.72
1845,chi,3.77
1845,haw,2.24
1845,nu,22.27
1846,chi,4.88
1846,haw,2.59
1846,nu,22.67
1847,chi,5.09
1847,haw,2.50
1847,nu,22.05
1848,chi,4.20
1848,haw,2.69
1848,nu,24.46
1849,chi,3.79
1849,haw,2.57
1849,nu,24.48
1850,chi,4.35
1850,haw,3.58
1850,nu,24.57
1851,chi,5.19
1851,haw,2.50
1851,nu,25.27
1852,chi,5.09
1852,haw,3.56
1852,nu,26.12
1853,chi,5.26
1853,haw,4.90
1853,nu,28.07
1854,chi,6.37
1854,haw,3.20
1854,nu,27.68
1855,chi,4.97
1855,haw,4.00
1855,nu,27.29
1856,chi,5.45
1856,haw,3.91
1856,nu,28.40
1857,chi,5.18
1857,haw,3.00
1857,nu,26.21
1858,chi,5.62
1858,haw,2.12
1858,nu,25.02
1859,chi,5.42
1859,haw,3.25
1859,nu,25.66
1860,chi,5.59
1860,haw,2.59
1860,nu,27.96
1861,chi,5.21
1861,haw,1.57
1861,nu,23.25

1862,chi,4.83
1862,haw,2.47
1862,nu,23.39
1863,chi,4.92
1863,haw,2.00
1863,nu,24.02
1864,chi,5.25
1864,haw,4.46
1864,nu,25.25
1865,chi,5.15
1865,haw,3.59
1865,nu,26.47
1866,chi,5.14
1866,haw,2.50
1866,nu,26.43
1867,chi,4.26
1867,haw,1.53
1867,nu,26.32
1868,chi,5.75
1868,haw,2.56
1868,nu,26.42
1869,chi,4.89
1869,haw,1.60
1869,nu,26.40
1870,chi,5.31
1870,haw,4.60
1870,nu,25.91
1871,chi,5.84
1871,haw,1.83
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1873,chi,4.34
1873,haw,1.92
1873,nu,26.23
1874,chi,5.52
1874,haw,2.64
1874,nu,28.02
1875,chi,4.92
1875,haw,4.25
1875,nu,28.27
1876,chi,5.55
1876,haw,4.00
1876,nu,29.52
1877,chi,5.50
1877,haw,2.09
1877,nu,30.72
1878,chi,4.91
1878,haw,2.79
1878,nu,29.07
1879,chi,5.33
1879,haw,2.52
1879,nu,30.48
1880,chi,5.59
1880,haw,2.85
1880,nu,32.46

1881,chi,5.33
1881,haw,2.62
1881,nu,32.76
1882,chi,5.33
1882,haw,2.52
1882,nu,33.59
1883,chi,6.05
1883,haw,3.19
1883,nu,35.73
1884,chi,5.38
1884,haw,3.38
1884,nu,33.40
1885,chi,6.69
1885,haw,3.12
1885,nu,35.46
1886,chi,5.51
1886,haw,3.23
1886,nu,31.04
1887,chi,5.68
1887,haw,3.77
1887,nu,35.62
1888,chi,6.91
1888,haw,2.16
1888,nu,32.87
1889,chi,4.99
1889,haw,3.96
1889,nu,30.93
1890,chi,5.53
1890,haw,4.47
1890,nu,33.55
1891,chi,5.61
1891,haw,4.95
1891,nu,34.32
1892,chi,6.31
1892,haw,5.17
1892,nu,37.08
1893,chi,5.26
1893,haw,3.62
1893,nu,35.66
1894,chi,5.62
1894,haw,3.08
1894,nu,38.43
1895,chi,6.92
1895,haw,4.62
1895,nu,38.20
1896,chi,6.47
1896,haw,6.64
1896,nu,38.69
1897,chi,5.80
1897,haw,7.22
1897,nu,40.56
1898,chi,6.23
1898,haw,5.07
1898,nu,42.80
1899,chi,6.93
1899,haw,5.62
1899,nu,45.46

1900,chi,7.61
1900,haw,6.41
1900,nu,47.29
1901,chi,7.27
1901,haw,8.34
1901,nu,46.11
1902,chi,7.47
1902,haw,7.95
1902,nu,45.91
1903,chi,6.11
1903,haw,9.47
1903,nu,44.39
1904,chi,7.98
1904,haw,6.26
1904,nu,47.92
1905,chi,7.24
1905,haw,5.00
1905,nu,46.63
1906,chi,6.18
1906,haw,5.84
1906,nu,46.29
1907,chi,6.79
1907,haw,6.58
1907,nu,46.79
1908,chi,6.28
1908,haw,8.84
1908,nu,47.46
1909,chi,6.25
1909,haw,5.40
1909,nu,45.16
1910,chi,7.13
1910,haw,7.31
1910,nu,46.14
1911,chi,6.60
1911,haw,8.60
1911,nu,47.78
1912,chi,7.18
1912,haw,8.83
1912,nu,47.12
1913,chi,6.31
1913,haw,7.71
1913,nu,47.94
1914,chi,6.87
1914,haw,10.31
1914,nu,47.33
1915,chi,6.55
1915,haw,4.73
1915,nu,46.98
1916,chi,6.88
1916,haw,9.59
1916,nu,47.04
1917,chi,6.78
1917,haw,7.46
1917,nu,49.57
1918,chi,6.39
1918,haw,9.90
1918,nu,47.48

1919,chi,6.55
1919,haw,8.64
1919,nu,46.24
1920,chi,6.59
1920,haw,8.51
1920,nu,49.14
1921,chi,6.32
1921,haw,6.46
1921,nu,43.68
1922,chi,6.73
1922,haw,9.06
1922,nu,45.69
1923,chi,5.71
1923,haw,5.51
1923,nu,40.45
1924,chi,4.76
1924,haw,6.62
1924,nu,39.60
1925,chi,5.57
1925,haw,10.17
1925,nu,37.02
1926,chi,5.56
1926,haw,4.34
1926,nu,37.62
1927,chi,5.09
1927,haw,7.65
1927,nu,38.73
1928,chi,5.98
1928,haw,6.76
1928,nu,38.42
1929,chi,5.15
1929,haw,7.06
1929,nu,40.25
1930,chi,5.23
1930,haw,5.97
1930,nu,40.86
1931,chi,5.32
1931,haw,8.98
1931,nu,38.42
1932,chi,5.27
1932,haw,5.07
1932,nu,36.25
1933,chi,4.24
1933,haw,4.69
1933,nu,32.88
1934,chi,5.22
1934,haw,6.35
1934,nu,37.61
1935,chi,5.19
1935,haw,8.41
1935,nu,38.66
1936,chi,5.08
1936,haw,7.16
1936,nu,38.49
1937,chi,5.39
1937,haw,8.15
1937,nu,39.27

1938,chi,5.93
1938,haw,6.21
1938,nu,38.60
1939,chi,5.43
1939,haw,7.19
1939,nu,38.90
1940,chi,5.80
1940,haw,7.75
1940,nu,37.48
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1941,haw,5.85
1941,nu,37.19
1942,chi,5.54
1942,haw,6.63
1942,nu,37.16
1943,chi,5.61
1943,haw,6.33
1943,nu,35.90
1944,chi,5.11
1944,haw,5.43
1944,nu,34.17
1945,chi,5.43
1945,haw,7.45
1945,nu,35.34
1946,chi,6.18
1946,haw,6.97
1946,nu,39.32
1947,chi,5.65
1947,haw,7.75
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