

| Student ID | phi   | theta | sigma_epsilon^2 | time_series_number |
|------------|-------|-------|-----------------|--------------------|
| 1185072    | -0.84 | 0.42  | 2.15            | 1                  |
| 1185696    | 0.77  | 0.70  | 2.32            | 2                  |
| 1214031    | -0.53 | 0.27  | 1.30            | 3                  |
| 1344591    | -0.43 | -0.35 | 1.61            | 4                  |
| 1356954    | 0.48  | 0.61  | 2.68            | 5                  |
| 1494891    | -0.56 | -0.49 | 2.60            | 6                  |
| 1495800    | 0.69  | -1.13 | 2.04            | 7                  |
| 1496163    | 0.88  | -1.22 | 2.53            | 8                  |
| 1497759    | 0.47  | 0.29  | 2.23            | 9                  |
| 1505385    | -0.72 | 2.06  | 2.83            | 10                 |
| 1506576    | 0.87  | 1.43  | 1.66            | 11                 |
| 1510335    | -0.62 | -1.88 | 1.22            | 12                 |
| 1513179    | -0.49 | -0.84 | 1.46            | 13                 |
| 1513788    | 0.70  | -0.97 | 1.95            | 14                 |
| 1515690    | 0.50  | -1.30 | 1.66            | 15                 |
| 1549203    | 0.56  | 0.28  | 1.74            | 16                 |
| 1561293    | 0.47  | 1.01  | 1.75            | 17                 |
| 1575522    | 0.55  | -0.92 | 1.19            | 18                 |
| 1578150    | -0.56 | -0.62 | 1.78            | 19                 |
| 1700996    | -0.40 | 1.10  | 1.99            | 20                 |
| 1701863    | 0.55  | -1.11 | 1.95            | 21                 |
| 1701992    | -0.75 | -0.24 | 2.64            | 22                 |
| 1702625    | -0.79 | -0.68 | 2.91            | 23                 |
| 1702640    | -0.49 | -0.38 | 2.53            | 24                 |
| 1703537    | 0.51  | -1.26 | 2.06            | 25                 |
| 1703666    | -0.73 | 0.31  | 2.91            | 26                 |
| 1703699    | 0.43  | -1.10 | 1.53            | 27                 |
| 1704539    | -0.61 | -1.87 | 2.22            | 28                 |
| 1705202    | -0.63 | 0.74  | 2.15            | 29                 |
| 1705451    | 0.41  | -1.26 | 2.30            | 30                 |
| 1705538    | -0.58 | 1.33  | 2.13            | 31                 |
| 1705703    | -0.41 | 0.90  | 2.87            | 32                 |
| 1706018    | 0.52  | -0.91 | 1.67            | 33                 |
| 1706576    | 0.66  | -0.35 | 1.94            | 34                 |
| 1708841    | -0.59 | -0.43 | 1.85            | 35                 |
| 1710380    | 0.48  | -0.83 | 2.07            | 36                 |
| 1711445    | -0.43 | 0.95  | 2.33            | 37                 |
| 1711532    | 0.73  | 0.39  | 2.10            | 38                 |
| 1711799    | -0.82 | 0.84  | 2.55            | 39                 |
| 1711844    | 0.46  | 0.60  | 2.13            | 40                 |
| 1712351    | 0.67  | 1.14  | 2.27            | 41                 |
| 1714151    | 0.45  | 1.14  | 1.59            | 42                 |
| 1714283    | 0.46  | 1.88  | 1.73            | 43                 |
| 1715207    | 0.80  | -2.12 | 1.23            | 44                 |
| 1716344    | 0.47  | -1.19 | 1.77            | 45                 |

|         |       |       |      |    |
|---------|-------|-------|------|----|
| 1717163 | -0.76 | 0.22  | 1.53 | 46 |
| 1717289 | -0.83 | 1.30  | 2.36 | 47 |
| 1717634 | -0.80 | -0.94 | 2.45 | 48 |
| 1717820 | -0.80 | -1.96 | 2.36 | 49 |
| 1718180 | -0.73 | -0.37 | 2.62 | 50 |
| 1718465 | -0.62 | 0.29  | 2.25 | 51 |
| 1718963 | 0.44  | -0.63 | 2.68 | 52 |
| 1719176 | -0.66 | 1.81  | 1.99 | 53 |
| 1719659 | 0.55  | 1.33  | 1.35 | 54 |
| 1719680 | -0.43 | -0.84 | 2.19 | 55 |
| 1720220 | 0.54  | 1.97  | 2.58 | 56 |
| 1721564 | 0.77  | 1.33  | 1.08 | 57 |
| 1722200 | -0.63 | -1.56 | 1.75 | 58 |
| 1723829 | 0.67  | 2.33  | 2.67 | 59 |
| 1724810 | -0.63 | 0.44  | 2.81 | 60 |
| 1725077 | 0.73  | -0.70 | 2.83 | 61 |
| 1725740 | -0.47 | 0.50  | 2.43 | 62 |
| 1726133 | -0.49 | 0.75  | 1.69 | 63 |
| 1728071 | 0.64  | 0.21  | 2.02 | 64 |
| 1728578 | 0.57  | 2.43  | 2.79 | 65 |
| 1728938 | -0.80 | -0.64 | 1.42 | 66 |
| 1729508 | 0.43  | 0.27  | 1.66 | 67 |
| 1730012 | 0.51  | -0.37 | 2.29 | 68 |
| 1731821 | -0.75 | 1.14  | 2.64 | 69 |
| 1731887 | -0.82 | -0.57 | 1.78 | 70 |
| 1732466 | -0.88 | 1.85  | 1.61 | 71 |
| 1734596 | -0.48 | 1.04  | 2.31 | 72 |
| 1734791 | 0.62  | -0.36 | 1.66 | 73 |
| 1736171 | -0.52 | 0.21  | 1.69 | 74 |
| 1740899 | 0.49  | -1.67 | 1.18 | 75 |
| 1746272 | -0.71 | -0.66 | 2.72 | 76 |
| 1768694 | 0.75  | 1.40  | 2.92 | 77 |
| 1782056 | 0.80  | -0.30 | 2.71 | 78 |
| 1843211 | -0.76 | -1.92 | 2.81 | 79 |
| 1843712 | -0.63 | 0.67  | 1.03 | 80 |
| 1843790 | 0.54  | -0.59 | 2.56 | 81 |
| 1844123 | 0.55  | 0.79  | 2.81 | 82 |
| 1844270 | 0.44  | 1.44  | 1.37 | 83 |
| 1844345 | 0.48  | 0.22  | 2.09 | 84 |
| 1844537 | 0.59  | -0.80 | 2.38 | 85 |
| 1844579 | 0.79  | 0.81  | 2.12 | 86 |
| 1844945 | -0.46 | 0.40  | 2.02 | 87 |
| 1845989 | -0.45 | 0.90  | 2.25 | 88 |
| 1846103 | -0.49 | -0.43 | 2.78 | 89 |
| 1846106 | 0.53  | 1.51  | 2.95 | 90 |
| 1846250 | 0.88  | -0.92 | 1.39 | 91 |

|         |       |       |      |     |
|---------|-------|-------|------|-----|
| 1846337 | 0.84  | 2.09  | 2.21 | 92  |
| 1846445 | 0.59  | 1.95  | 2.04 | 93  |
| 1846892 | 0.87  | -1.95 | 1.68 | 94  |
| 1847045 | 0.79  | -0.33 | 1.41 | 95  |
| 1847291 | -0.84 | 0.27  | 2.82 | 96  |
| 1847414 | -0.85 | 0.34  | 1.45 | 97  |
| 1848521 | 0.66  | 1.18  | 1.98 | 98  |
| 1848839 | 0.81  | 0.53  | 2.90 | 99  |
| 1849097 | 0.57  | -0.30 | 1.67 | 100 |
| 1849220 | -0.68 | 1.17  | 2.82 | 101 |
| 1849526 | 0.61  | 0.51  | 1.69 | 102 |
| 1849643 | 0.87  | 0.42  | 2.41 | 103 |
| 1849853 | -0.77 | -0.93 | 2.00 | 104 |
| 1850033 | -0.71 | -0.61 | 2.57 | 105 |
| 1850036 | 0.60  | 1.48  | 2.68 | 106 |
| 1850783 | -0.74 | 0.35  | 2.86 | 107 |
| 1851122 | -0.49 | 1.89  | 2.43 | 108 |
| 1851455 | -0.46 | -2.11 | 2.69 | 109 |
| 1851767 | 0.63  | 0.60  | 2.19 | 110 |
| 1852193 | 0.59  | 2.18  | 2.23 | 111 |
| 1852421 | 0.67  | 0.78  | 2.06 | 112 |
| 1852595 | 0.46  | 1.33  | 2.73 | 113 |
| 1853156 | -0.63 | 1.20  | 1.19 | 114 |
| 1853627 | 0.41  | -1.26 | 1.07 | 115 |
| 1853768 | 0.66  | -1.22 | 1.12 | 116 |
| 1853930 | -0.43 | -1.32 | 2.95 | 117 |
| 1854350 | -0.90 | -0.53 | 2.67 | 118 |
| 1854554 | 0.60  | -2.37 | 1.29 | 119 |
| 1854740 | 0.49  | 0.63  | 1.64 | 120 |
| 1854788 | 0.85  | -0.97 | 1.74 | 121 |
| 1855286 | 0.47  | 0.37  | 2.54 | 122 |
| 1855388 | 0.47  | 0.55  | 1.11 | 123 |
| 1855403 | 0.86  | 0.24  | 1.32 | 124 |
| 1856255 | -0.63 | -0.67 | 2.90 | 125 |
| 1856318 | 0.63  | 0.40  | 1.30 | 126 |
| 1856921 | -0.66 | 0.81  | 1.97 | 127 |
| 1857092 | -0.60 | 0.61  | 1.83 | 128 |
| 1857236 | 0.68  | 1.03  | 1.09 | 129 |
| 1857245 | 0.83  | -1.36 | 2.10 | 130 |
| 1857476 | -0.83 | 0.57  | 2.32 | 131 |
| 1857602 | -0.70 | 1.27  | 2.87 | 132 |
| 1857845 | 0.41  | -1.68 | 1.42 | 133 |
| 1858802 | -0.64 | 0.45  | 1.44 | 134 |
| 1858853 | -0.48 | -2.42 | 1.32 | 135 |
| 1859450 | -0.41 | -1.84 | 2.52 | 136 |
| 1860317 | 0.82  | -1.01 | 2.66 | 137 |

|         |       |       |      |     |
|---------|-------|-------|------|-----|
| 1860887 | -0.59 | -1.21 | 2.79 | 138 |
| 1860947 | -0.64 | -2.02 | 1.69 | 139 |
| 1861313 | -0.81 | 1.20  | 1.05 | 140 |
| 1861658 | -0.77 | 1.34  | 2.24 | 141 |
| 1861742 | 0.53  | 0.34  | 2.38 | 142 |
| 1862000 | -0.69 | -0.42 | 2.96 | 143 |
| 1862168 | 0.75  | 1.40  | 2.98 | 144 |
| 1862318 | 0.55  | -1.64 | 2.53 | 145 |
| 1862354 | 0.86  | 1.64  | 1.09 | 146 |
| 1863245 | -0.70 | 0.80  | 2.45 | 147 |
| 1863422 | -0.72 | -0.75 | 2.79 | 148 |
| 1864160 | 0.81  | -1.07 | 1.14 | 149 |
| 1865141 | 0.86  | -0.78 | 2.35 | 150 |
| 1865327 | -0.60 | -1.84 | 2.74 | 151 |
| 1866611 | -0.74 | -1.74 | 1.85 | 152 |
| 1866674 | -0.52 | -0.79 | 1.53 | 153 |
| 1867091 | 0.62  | -1.08 | 2.30 | 154 |
| 1867913 | -0.41 | -0.45 | 2.11 | 155 |
| 1868678 | -0.63 | 0.51  | 2.21 | 156 |
| 1869053 | -0.80 | 0.28  | 1.54 | 157 |
| 1869323 | -0.61 | -2.46 | 2.00 | 158 |
| 1869416 | -0.66 | -1.40 | 2.83 | 159 |
| 1870562 | -0.85 | 2.08  | 2.00 | 160 |
| 1871834 | -0.46 | -1.34 | 2.56 | 161 |
| 1871903 | -0.76 | 0.58  | 2.27 | 162 |
| 1872512 | 0.76  | -0.49 | 2.29 | 163 |
| 1873001 | 0.81  | 0.86  | 2.19 | 164 |
| 1873151 | 0.72  | 0.27  | 2.18 | 165 |
| 1873334 | 0.51  | -0.84 | 1.33 | 166 |
| 1873814 | 0.72  | -0.69 | 2.59 | 167 |
| 1873940 | -0.69 | -1.16 | 1.06 | 168 |
| 1874123 | 0.71  | 3.53  | 2.13 | 169 |
| 1874231 | -0.46 | 0.37  | 1.55 | 170 |
| 1874366 | 0.50  | 0.77  | 1.67 | 171 |
| 1874954 | -0.69 | -1.07 | 1.03 | 172 |
| 1875212 | 0.85  | 0.79  | 2.66 | 173 |
| 1875614 | -0.42 | -1.27 | 1.62 | 174 |
| 1875617 | -0.71 | 0.34  | 2.50 | 175 |
| 1877978 | -0.44 | 0.65  | 2.35 | 176 |
| 1878464 | -0.61 | 2.21  | 2.66 | 177 |
| 1879100 | -0.75 | -1.00 | 2.45 | 178 |
| 1880660 | 0.48  | -0.26 | 2.77 | 179 |
| 1880777 | -0.47 | 1.80  | 1.67 | 180 |
| 1883432 | 0.62  | 1.35  | 2.69 | 181 |
| 1883447 | -0.87 | -0.96 | 2.82 | 182 |
| 1883471 | 0.88  | 1.24  | 2.55 | 183 |

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|---------|-------|-------|------|-----|
| 1883858 | 0.63  | -0.69 | 1.06 | 184 |
| 1884818 | 0.54  | -0.34 | 1.48 | 185 |
| 1886090 | -0.62 | 0.59  | 1.99 | 186 |
| 1890311 | -0.64 | 1.53  | 2.92 | 187 |
| 1905197 | -0.41 | 0.82  | 1.87 | 188 |
| 1907357 | 0.63  | 0.57  | 1.32 | 189 |
| 1912202 | -0.43 | -0.66 | 1.37 | 190 |
| 1912289 | 0.53  | 1.94  | 2.38 | 191 |
| 1920353 | -0.78 | -0.96 | 2.47 | 192 |
| 1926905 | -0.74 | 1.78  | 1.51 | 193 |
| 1938572 | 0.67  | -1.95 | 1.73 | 194 |
| 1952888 | -0.61 | -0.76 | 1.45 | 195 |
| 1954652 | -0.77 | 0.40  | 1.37 | 196 |
| 1955564 | 0.51  | 0.50  | 1.36 | 197 |
| 1958945 | -0.81 | 0.48  | 1.94 | 198 |
| 2083880 | -0.46 | -0.22 | 1.17 | 199 |
| 2087003 | -0.82 | -0.87 | 1.17 | 200 |
| 2169863 | -0.67 | -1.59 | 2.26 | 201 |
| 2172704 | 0.80  | -1.06 | 2.03 | 202 |
| 2202254 | 0.79  | -0.24 | 2.20 | 203 |
| 2217761 | 0.59  | -1.07 | 1.09 | 204 |
| 2242799 | -0.70 | -2.52 | 1.37 | 205 |
| 2243186 | 0.56  | 0.28  | 2.66 | 206 |
| 2249909 | -0.65 | -0.42 | 1.40 | 207 |
| 2251688 | -0.77 | -0.61 | 1.25 | 208 |
| 2251862 | 0.49  | 0.46  | 2.65 | 209 |
| 2252276 | 0.55  | 1.13  | 2.89 | 210 |
| 2252699 | 0.49  | 1.40  | 2.58 | 211 |
| 2259782 | -0.41 | 0.26  | 1.30 | 212 |
| 2261354 | -0.72 | -2.86 | 3.00 | 213 |
| 2261519 | 0.52  | -1.09 | 1.67 | 214 |
| 2276282 | 0.85  | 0.76  | 1.03 | 215 |
| 2277200 | 0.54  | -1.98 | 2.39 | 216 |
| 2280545 | -0.87 | -0.62 | 2.87 | 217 |
| 2281295 | 0.57  | -1.22 | 1.86 | 218 |
| 2281382 | -0.73 | -0.35 | 2.62 | 219 |
| 2290037 | 0.50  | -1.85 | 2.69 | 220 |
| 2290466 | -0.68 | -1.49 | 1.55 | 221 |
| 2296265 | 0.58  | 0.94  | 1.09 | 222 |
| 2298374 | -0.87 | -0.48 | 1.89 | 223 |
| 2301389 | 0.68  | 1.21  | 2.52 | 224 |
| 2315657 | 0.58  | 1.11  | 1.58 | 225 |
| 2325812 | -0.43 | -2.02 | 2.61 | 226 |
| 2326115 | 0.60  | -1.27 | 1.80 | 227 |
| 2340737 | 0.47  | -1.88 | 2.32 | 228 |
| 2341508 | 0.73  | -1.12 | 1.47 | 229 |

|         |       |       |      |     |
|---------|-------|-------|------|-----|
| 2341583 | 0.82  | 0.64  | 2.67 | 230 |
| 2341715 | -0.84 | -0.37 | 2.03 | 231 |
| 2347682 | -0.80 | -1.46 | 1.10 | 232 |
| 2351279 | -0.51 | 2.12  | 2.16 | 233 |
| 2351564 | -0.70 | 1.65  | 2.59 | 234 |
| 2354654 | -0.80 | 1.12  | 2.19 | 235 |
| 2355158 | 0.67  | -1.20 | 1.68 | 236 |
| 2356148 | 0.49  | 1.51  | 1.25 | 237 |
| 2358380 | -0.67 | -1.42 | 2.75 | 238 |
| 2359184 | -0.60 | 0.78  | 2.23 | 239 |