```
1 /usr/local/bin/python3.9 "/Users/steve/Desktop/
  OneDrive - The University of Liverpool/Data Mining/
  Assignment 2/CA2.py"
 2 [10.16627317 10.32765633 10.14623632]
 3 [0.89001845 1.51773935 1.94779069]
 4 [1.13118865 0.229943 0.56250422]
5 [1.11924317 0.0515929 0.30940998]
 6 [0.12944578 0.
                        0.04134367]
 7 [0. 0. 0.]
 8 [[-7.18349923e-02 -1.96893022e-01 -2.48005538e-01 -
  1.91896462e-02
      2.64660252e-01 1.68637135e-02 -1.04798923e+00 -
  3.75481750e-01
10
      5.31780385e-03 -3.93720713e-01 5.71676154e-01 -
  4.38470846e-02
11
      1.39239173e-01 -2.70361137e-01 2.41471654e-01
  7.56804615e-02
12
     -2.67217558e-01 -2.62097940e-01 -2.06039462e-01
  1.51983365e-02
13
     9.70673654e-02 -3.60983712e-01 2.21809173e-02 -
  1.30596419e-01
14
      1.21116923e-01 -5.30219788e-02 -1.57549923e-01
  8.37524673e-02
      5.12350962e-03 1.34496401e-01 1.46533775e-01 -
15
  4.82463210e-02
16
      2.22026290e-01 2.95989077e-02 1.50939644e-01
  7.65960577e-02
17
     3.99668481e-01 1.18344206e-01 6.89835192e-02
  2.99511827e-02
18
      5.40715962e-02
                     6.70759750e-02 -9.03958462e-02
  2.28580635e-02
19
    -2.04369265e-01
                      7.46396327e-02 -5.05064192e-02 -
  1.63498173e-01
20
     -9.62387692e-03
                      4.15358654e-02 1.23707712e-01 -
  1.81379481e-01
21
     -1.24429469e-01
                      2.06886638e-01 6.08643462e-02
  2.05614396e-01
22
      2.01697867e-01 6.11326019e-02 2.18618615e-01 -
  1.00123375e-01
23
     -2.06487308e-01 -2.85788308e-01 -3.02697135e-02
  1.94189635e-01
```

```
24
     -3.37463288e-01 1.35279910e-01 1.44348946e-01 -
   1.30692712e-02
25
     -1.04536775e-01 9.28008846e-03 -1.90379135e-01
   1.09206958e-01
26
     -4.00214615e-03 -6.64701923e-04 -9.03744346e-02 -
   2.26096000e-01
27
      1.33877273e-01 -6.98937896e-02 2.28396213e-01
   1.35666225e-01
28
     -1.16801231e-01 1.32036996e-01 6.11259615e-03 -
   4.58865915e-02
     -1.62772873e-01 -8.55975385e-02 -4.63655538e-02
29
   2.02558271e-01
30
      7.36346731e-02 -2.61161038e-01 4.48385038e-02 -
   1.34658538e-01
      2.61139231e-02 -2.11509771e-01
31
                                      5.46891615e-02 -
   5.30473731e-01
     -9.73743673e-01 4.31225558e-02
32
                                      4.01250135e-02 -
   3.12410500e-01
33
      1.59994108e-01 9.64533288e-02 4.74263462e-04 -
   1.40336773e-01
34
     -1.87520423e-01 -6.54751058e-02 -2.43604423e-02
   3.27456192e-01
    -1.13774792e-02 -7.12512500e-02 8.74993288e-02
35
   3.91844788e-02
36
      2.97167096e-01 1.15745385e-02 1.14325077e-01
   1.34431865e-01
37
      8.91169365e-02 -4.51294067e-02 -1.91772855e-01
   1.82447000e-02
38
     -1.90424667e-01 2.49923385e-01 -1.15018654e-03
   4.38072392e-01
39
      7.94663077e-02 4.24751538e-02 -6.48645192e-03
   1.32817438e-01
40
     -1.93991223e-01 3.13873154e-02 -1.42981088e-01 -
   2.56440000e-02
41
      4.43564385e-02 -1.21973052e-01 1.03147565e-01
   1.03545840e-01
     -3.56630962e-02 -1.84208154e-01 5.92495385e-02
42
   3.75283654e-01
     -2.53508599e-01 -9.17281204e-02
43
                                      1.50765065e-01
   5.05401962e-02
44
      2.34662115e-02 -2.33424808e-01
                                      8.06310894e-02
```

```
44 2.17995500e-01
45
      2.09524258e-01 -1.92383702e-01 -1.44168296e-01 -
   1.01871664e-01
     -1.23216038e-03 -1.10759269e-01 8.43973308e-02 -
46
   5.75682462e-02
47
     -4.57546288e-02 -2.61282115e-02 2.35351877e-01
   1.58077963e-01
     -1.29241327e-01 -1.58525160e-02 -3.25056250e-01
48
   2.73429735e-01
49
     -1.05023819e-01 8.52342192e-02 -1.67513040e-01 -
   4.41896154e-02
50
      8.94471908e-02
                      1.05268610e-01 -2.12537450e-01 -
   1.52238162e-01
     -1.22342635e-02 2.44974771e-01 -9.26504533e-02 -
51
   2.89591981e-02
52
      1.50452946e-01 -3.31170710e-01 -2.01825135e-01
   5.33805385e-02
53
     -4.10322115e-03 -1.83446481e-01 -2.37618919e-02
   3.38506423e-02
54
      6.78230327e-02 7.30537333e-02 -1.95309096e-01
   9.43175577e-02
55
      1.16908413e-01 -1.13670481e-02 -6.67303942e-02 -
   9.12372019e-02
56
      7.48503077e-02 1.50864000e-01 -2.27177204e-01
   8.14904827e-02
57
      2.80024277e-01 -7.80092783e-02 2.44990660e-01 -
   9.41270731e-02
      5.43175673e-02 -7.83312019e-02 -6.37065962e-02
58
   9.75286846e-02
59
     -1.22292692e-01
                      1.03766308e-01 -2.00747962e-02
   3.52713327e-01
      2.78512558e-01
                      1.79458448e-01 -2.30352135e-02 -
60
   5.64981692e-02
      1.21631231e-01
61
                      1.43774308e-01
                                      1.63277721e-01
   1.01056756e-01
     -1.03229573e-01
62
                      1.00884346e-01
                                      1.41634523e-01
   2.61422438e-01
     -1.06907615e-01 4.58372885e-02 -9.59769710e-02 -
63
   1.46596951e-01
64
     -1.75966260e+00 -3.96036765e-01 -2.34846429e-01
   1.32249950e-01
```

File - CA2			
65	-1.69284523e-01	2.23691288e-01	5.79356052e-02
	-6.53096692e-02		
66	6.68210538e-02	-4.84879038e-02	2.64123769e-02
	1.23244592e-01		
67	1.02594217e-01	5.58755981e-02	3.90419615e-02
	3.22723154e-01		
68	2.44787715e-01	1.53282398e-01	1.03525365e-01
	2.01622942e-02	E 4055E004 07	4 00/0/040 04
69	-5.48609615e-02	7.10557981e-03	1.28496212e-01
5 0	1.33750096e-01	0 5500500/ 04	4 (0070500 04
70	1.10927827e-01	2.578850966-01	-1.40038500e-01
74	-1.84069231e-01	1 /1/00071 - 01	1 10/00/05 - 01
71	-6.49719231e-03	1.61498231e-01	1.19688625e-01
72	-5.63515077e-02 -4.33949560e-01	1 000700/20 01	2 001//0275 01
/2	-1.72023596e-02	1.99879942e-01	2.08164923e-01
73		-1.80493394e-01	5.47917942e-02
/3	-9.61715192e-03	-1.004733746-01	J.4/71/742E-02
74	2.99890385e-02	1 868936350-01	-7.52943269e-02
′ ¯	1.49080000e-02	1.000/00000 01	7.327432076 02
75	-3.88783635e-02	1.91399785e-01	2.06122815e-01
	1.21434288e-01		
76	2.34334971e-01	-6.61500462e-02	-8.11969231e-02
	4.02036635e-02		
77	-9.02618269e-02	3.05526694e-01	-1.85295962e-02
	-3.02453558e-01		
78	3.58444473e-01	-8.01557346e-02	-5.69002500e-02
	-4.46181154e-02		
79	1.14821042e-01	-1.27679558e-01	8.79847308e-03
	2.27745904e-01		
80	-1.62114596e-02	-9.40176154e-02	-1.91534931e-02
	1.69910217e-01		
81		8.41621154e-02	-1.59191379e-01
	9.70341231e-02	4 0754/7/5 04	/ 555//455 00
82	_	-1.93714365e-01	6.57766173e-02
0.7	1.81405833e-01]	4 0/0/50/7- 04	D 0005/404 - 07
83	[-1.89521478e-01	-1.040650456-01	/.UZY561Z16-U3
84	-2.88083940e-01	-7.77975578e-01	_7 000000102 01
04	-2.01636802e-01	-/.//7/00/66-01	-0.0000176-01
85		-7.93338304e-01	3 78685302 ₋ 01
	1.303/22026-01	7.70000046-01	0.70003302E-01

```
85
     -7.03948103e-02
       4.04179308e-01 2.72995591e-01 3.70473440e-01
 86
     -1.84871247e-01
      -1.15573318e-01 -3.48343500e-01 6.66270940e-02
 87
     -3.41454422e-02
       1.42053400e-01 -1.05827784e-02 2.72923338e-01
 88
      8.74486397e-02
      -1.35174293e-01 -2.71905517e-01 -1.22839705e-01
 89
      5.40729559e-02
 90
      1.17399649e-02 -2.68739836e-02 3.87568708e-01
      1.50697418e-01
 91
       1.81676112e-02 8.45878808e-02 3.33815790e-01
      1.10292667e-01
 92
      -1.88007397e-01 6.92864901e-02 7.77712500e-02
      9.92550310e-02
      1.95090896e-01 -1.66862141e-01 1.61986102e-01
 93
     -3.29891233e-01
      -6.04957169e-02 2.90364698e-02 2.32212966e-02
 94
     -2.06448346e-01
 95
       1.96378049e-01 -2.01734996e-01 -8.46464833e-02
      9.54598819e-02
       1.22667025e-01
                      2.67786801e-01 -3.01664741e-01
 96
     -6.42065129e-02
       6.15245259e-02
 97
                      1.40515554e-01 2.53167086e-01
     -8.68628053e-02
 98
     -5.98546483e-02
                      7.46791233e-02 -3.86439943e-01
      1.86599147e-01
 99
     -4.49449836e-01 -1.36715159e-01 1.07836723e-01
     -8.29862845e-03
      -2.02209899e-01
                      4.26087522e-02 -3.91730075e-01
100
     -1.75014337e-01
101
     -9.56786164e-02 -7.13642733e-02 3.92780001e-02
      3.28778888e-02
       9.74219276e-02
                      1.69395939e-01 -7.31516155e-02
102
      1.24291621e-02
103
       1.11909195e-01 3.23483200e-01 2.32580943e-01
      2.09547797e-01
     -4.93431768e-01 -2.52030000e-01 -3.46498522e-01
104
     -1.95538718e-01
     -2.27720165e-01 7.08893185e-02 5.90443776e-02
105
     -2.57192560e-02
```

File - CA2			
106	-2.74500060e-01	-2.64387399e-01	1.06049993e-01
	1.33238714e-01		
107		-2.42091648e-01	2.59652028e-01
	-1.22583672e-02		
108	7.64828621e-03	-7.55517966e-02	8.65369578e-01
	-1.45262509e-01		
109	5.74175397e-02	-1.44588872e-01	-6.39706224e-02
	2.35143792e-01		
110	-9.94775957e-02	5.46313166e-02	1.59566875e-01
	2.10801725e-01		
111		-9.98950190e-03	-8.03831647e-02
	-1.21388559e-01		
112		-1.03929203e-01	-5.26712181e-02
	2.32116533e-01		
113		-1.17045403e-01	-1.97868191e-01
	1.03663627e-01		
114	4.41785259e-02	3.35613771e-01	-3.33161187e-02
445	5.70166138e-02	0 55070404 04	/ 000/////
115	-2.58040522e-01	2.57238101e-01	-6.87764414e-02
44.	6.83881138e-02	0 /757/047 04	4 0000/070 04
116	-1.93744905e-01	2.43736913e-01	1.02976930e-01
117	-2.37536517e-02	0 /0705000 00	1 050/0750 01
117		-9.40705888e-02	1.25868750e-01
118	2.07855189e-01	1 522/5/200 01	7 701175700 01
110		-1.52265429e-01	-3.301133386-01
119	1.06386505e-01 2.97770253e-01	-/ 14020429 ₀ -01	2 104040090-01
117	1.09105649e-01	-4.100270206-01	2.100000006-01
120		-5.32685440e-02	-2 330782070-01
120	-1.87981208e-01	3.320034406 02	2.000/02//6 01
121	-1.82166431e-01	2 36258791e-01	2.90337560e-01
	-2.10345361e-01	2.002007710 01	2.700070000 01
122		-2.85847603e-02	-7.91022328e-02
	-2.51294766e-01	2.000.70000 02	
123	-2.52489586e-02	-2.22541338e-01	-1.40126871e-01
	-7.68983302e-02		_ ,
124		-2.86281955e-01	-2.91183744e-01
	-1.90653017e-01		
125	-4.75391612e-02	2.71292317e-01	-9.47124440e-02
	3.55915474e-01		_
126	-4.52531526e-02	1.32811259e-01	-1.54652826e-02
		Dave C of 10	

```
126
      2.60108685e-01
127
       1.44712732e-01 2.17118761e-01 -2.19791831e-01
     -6.05225224e-02
128
       8.67379629e-02 -8.66585457e-03 -1.81933409e-01
     -3.42116440e-02
129
     -9.86190719e-02
                      1.17036078e-01 -8.35235272e-02
     -4.39728224e-02
       3.53053009e-01 -7.67171276e-02 -2.45614314e-02
130
      2.50101877e-02
      -2.78946945e-01 -6.76723543e-02 5.55333500e-02
131
      3.61289738e-01
       6.03873526e-02 -1.10961155e-01 4.08062078e-02
132
     -1.77101627e-01
133
      -1.69247655e-01 -2.08660226e-01 1.22729922e-02
     -2.50473334e-01
134
       3.43019683e-01 4.57996207e-03 -7.00231259e-02
     -4.25491431e-01
135
      -1.23835578e-01 -2.33181990e-02 6.46218224e-02
     -5.45815026e-02
136
       3.83040388e-01 -7.23531466e-02 -2.30439507e-01
     -7.68685738e-02
       2.34483254e-01
137
                       7.15237922e-02 -8.92806103e-02
      4.75282259e-02
       9.38228078e-02
                       3.86999216e-02 -3.18232664e-02
138
     -8.37335397e-02
139
      -6.27065612e-01
                       1.05742166e-01 4.50919336e-01
      3.30742827e-01
140
       1.05522012e-01
                       1.40462346e-01 1.40103942e-01
      8.37127569e-02
       3.47029268e-01 -2.14261284e-01 1.45065987e-01
141
     -6.41218474e-02
142
       1.12614543e-01
                       2.11548562e-01 -3.18699515e-01
      7.70870293e-02
      -1.10254234e-01
                       1.22712134e-01 -2.07459362e-01
143
      1.73320050e-01
144
       1.17546931e-02
                       1.53444625e-01 4.04686250e-02
      1.52787380e-01
145
      -6.64868698e-02
                       3.35701095e-01 -8.41665853e-02
      1.09841172e-01
146
       1.87594418e-01
                       4.55042897e-02 1.50768220e-01
     -1.95985303e-01
```

File - CA2			
147	-2.74801940e-01	3.93815629e-01	1.94458767e-02
	2.97056928e-01		
148	1.93323933e-01	-4.22519167e-01	6.84794458e-02
	-3.06007782e-01		
149	2.66181534e-02	4.39683030e-01	-4.75486543e-01
	-6.68009070e-02		
150	-9.67299379e-02	5.05896750e-02	1.95062223e-01
	-1.42939332e-01		
151	-2.91522840e-01	-2.20716311e-01	-1.29819376e-01
	-2.29963640e-01		
152		-8.89719957e-02	-1.22983449e-01
	1.25403353e-02		
153	4.43812134e-01	-1.25321245e-01	2.19990888e-02
45.	1.35797455e-01	4 (57/5500 04	(00040550 00
154	-1.47994526e-02	1.45367780e-01	-6.29010578e-02
455	-1.61483424e-01	4 504/0505 - 04	7 470///70 - 04
155	-7.43422607e-02	-1.78149597e-U1	-3.13746437e-U1
15/	-2.69043409e-01	1 /0//0001 - 01	1 7/7///00- 01
156	5.06265990e-02	1.49648981e-01	1.34746488e-01
157	2.32787060e-02	2 00/50/172 01	-1.41735509e-01
137	-4.53884974e-02 9.84575738e-02]	-2.80430413e-01	-1.41/333096-01
158	7.84009324e-01	3.12755037e-01	6.03465634e-02
138	7.63975665e-02	3.12/3303/e-01	0.034030346-02
159	-1.79955136e-01	1 961291566-01	-9.77584317e-01
137	4.34109205e-02	1.701271300 01	7.773040176 01
160		3.17958657e-01	-3 41692022e-01
	1.65791113e-01	0.177000070 01	0.110720220 01
161		-8.23950491e-03	1.37664809e-01
	2.23490528e-01		
162	2.88017955e-01	-2.52844207e-01	-7.48392168e-02
	2.83080640e-01		
163	-4.66027278e-02	1.75725286e-01	1.27321427e-01
	1.39842574e-01		
164	1.17117795e-01	-1.40153204e-01	1.04175007e-01
	-2.34340094e-01		
165	-1.25791739e-01	3.14716578e-02	-4.03356323e-01
	1.74223820e-02		
166	2.21790558e-01	3.81314798e-01	1.97559945e-01
	-1.51969398e-01		
167	6.10643627e-02	-6.62971217e-02	-1.23099983e-01
L		Dags 9 of 19	

167 5.16817453e-03 168 6.79480559e-01 4.80716884e-02 7.86508323e-02 3.72056522e-01 169 -6.41678148e-02 -5.74232919e-02 -5.81075590e-03 -1.68521075e-02 170 -2.75853702e-01 -1.36135692e-01 1.58543328e-01 1.16484017e-01 171 2.52434433e-01 1.28411212e-01 -4.06151898e-01 2.82485356e-02 172 -1.45581548e-01 -3.07341127e-01 2.53708768e-01 -2.79002149e-02 173 1.81042304e-02 -2.03504063e-01 2.41464521e-01 -1.42604842e-01 174 4.07895903e-02 2.36582463e-01 6.18939180e-02 1.36208523e-01 175 -1.15661689e-01 2.67179864e-01 -6.56846398e-01 1.17371788e-01 176 8.83454199e-02 1.98583308e-01 1.95058353e-01 2.11732811e-01 177 -1.67588169e-01 1.05260447e-01 2.51172395e-01 3.71702789e-01 178 2.83420341e-01 -5.47074427e-01 8.08181110e-02 -6.29191758e-01 179 -4.60704873e-01 2.88582736e-01 2.89287087e-01 -4.12150773e-01 180 8.72623466e-02 2.96813099e-01 -3.04548718e-01 8.72288969e-02 181 -2.67630463e-01 -3.37235770e-03 2.48242775e-01 -4.73447998e-01 182 -8.94991947e-01 2.79974009e-01 7.62834858e-02 -2.02308099e-01 183 -1.6070495e-01 4.28705814e-02 2.33204060e-01 1.40088600e-01 1.28657870e-01 1.55305865e-02 3.19737791e-01 2.76377914e-02 185 1.93076646e-02 4.76327783e-02 -3.78934227e-01 -1.49416228e-01 1.62516596e-02 1.49255702e-01 1.70876986e-01 4.64413603e-02 -1.73517648e-01	File - CA2			
3.72056522e-01 169	167	5.16817453e-03		
169 -6.41678148e-02 -5.74232919e-02 -5.81075590e-03 170 -2.75853702e-01 -1.36135692e-01 1.58543328e-01 1.16484017e-01 1.28411212e-01 -4.06151898e-01 171 2.52434433e-01 1.28411212e-01 -4.06151898e-01 12.82485356e-02 2.79002149e-02 1.81042304e-02 -2.03504063e-01 2.41464521e-01 1-42604842e-01 1.42604842e-01 2.36582463e-01 6.18939180e-02 1.36208523e-01 2.67179864e-01 -6.56846398e-01 1.17371788e-01 1.98583308e-01 1.95058353e-01 1.1732811e-01 1.05260447e-01 2.51172395e-01 177 -1.67588169e-01 1.05260447e-01 2.51172395e-01 3.71702789e-01 2.88582736e-01 2.89287087e-01 179 -4.60764873e-01 2.88582736e-01 2.89287087e-01 180 -8.72623466e-02 2.96813099e-01 -3.04548718e-01 181 -2.67630463e-01 -3.37235770e-03 2.48242775e-01 4.73447998e-01 2.79974009e-01 7.62834858e-02 1.40088600e-01 1.55305865e-02 3.19737791e-01 2.76377914e-02 1.9	168	6.79480559e-01	4.80716884e-02	7.86508323e-02
-1.68521075e-02 170		3.72056522e-01		
170	169	-6.41678148e-02	-5.74232919e-02	-5.81075590e-03
1.16484017e-01 2.52434433e-01 1.28411212e-01 -4.06151898e-01 2.82485356e-02 172 -1.45581548e-01 -3.07341127e-01 2.53708768e-01 -2.79002149e-02 173 1.81042304e-02 -2.03504063e-01 2.41464521e-01 -1.42604842e-01 174 4.07895093e-02 2.36582463e-01 6.18939180e-02 1.36208523e-01 175 -1.15661689e-01 2.67179864e-01 -6.56846398e-01 1.17371788e-01 176 8.83454199e-02 1.98583308e-01 1.95058353e-01 2.11732811e-01 177 -1.67588169e-01 1.05260447e-01 2.51172395e-01 3.71702789e-01 178 2.83420341e-01 -5.47074427e-01 8.08181110e-02 -6.29191758e-01 179 -4.60704873e-01 2.88582736e-01 2.89287087e-01 -4.12150773e-01 180 -8.72623466e-02 2.96813099e-01 -3.04548718e-01 8.72288969e-02 181 -2.67630463e-01 -3.37235770e-03 2.48242775e-01 -4.73447998e-01 182 -8.94991947e-01 2.79974009e-01 7.62834858e-02 -2.02308099e-01 183 -1.60704495e-01 4.28705814e-02 2.33204060e-01 1.40088600e-01 1.40088600e-01 1.276377914e-02 1.93076646e-02 4.76327783e-02 -3.78934227e-01 -1.49416228e-01 1.62516596e-02 1.49255702e-01 1.70876986e-01 4.64413603e-02		-1.68521075e-02		
171	170	-2.75853702e-01	-1.36135692e-01	1.58543328e-01
2.82485356e-02 172		1.16484017e-01		
172	171	2.52434433e-01	1.28411212e-01	-4.06151898e-01
-2.79002149e-02 173		2.82485356e-02		
173	172	-1.45581548e-01	-3.07341127e-01	2.53708768e-01
-1.42604842e-01 174		-2.79002149e-02		
174	173	1.81042304e-02	-2.03504063e-01	2.41464521e-01
1.36208523e-01 175		-1.42604842e-01		
175	174	4.07895093e-02	2.36582463e-01	6.18939180e-02
1.17371788e-01 8.83454199e-02 1.98583308e-01 1.95058353e-01 2.11732811e-01 177 -1.67588169e-01 1.05260447e-01 2.51172395e-01 3.71702789e-01 178 2.83420341e-01 -5.47074427e-01 8.08181110e-02 -6.29191758e-01 179 -4.60704873e-01 2.88582736e-01 2.89287087e-01 -4.12150773e-01 180 -8.72623466e-02 2.96813099e-01 -3.04548718e-01 8.72288969e-02 181 -2.67630463e-01 -3.37235770e-03 2.48242775e-01 -4.73447998e-01 182 -8.94991947e-01 2.79974009e-01 7.62834858e-02 -2.02308099e-01 183 -1.60704495e-01 4.28705814e-02 2.33204060e-01 1.40088600e-01 184 1.28657870e-01 1.55305865e-02 3.19737791e-01 2.76377914e-02 185 1.93076646e-02 4.76327783e-02 -3.78934227e-01 -1.49416228e-01 4.11647629e-01 -1.67277110e-01 -1.60514058e-01 1.62516596e-02 1.70876986e-01 4.64413603e-02		1.36208523e-01		
176 8.83454199e-02 1.98583308e-01 1.95058353e-01 2.11732811e-01 177 -1.67588169e-01 1.05260447e-01 2.51172395e-01 3.71702789e-01 178 2.83420341e-01 -5.47074427e-01 8.08181110e-02 -6.29191758e-01 179 -4.60704873e-01 2.88582736e-01 2.89287087e-01 -4.12150773e-01 180 -8.72623466e-02 2.96813099e-01 -3.04548718e-01 8.72288969e-02 181 -2.67630463e-01 -3.37235770e-03 2.48242775e-01 -4.73447998e-01 182 -8.94991947e-01 2.79974009e-01 7.62834858e-02 -2.02308099e-01 183 -1.60704495e-01 4.28705814e-02 2.33204060e-01 1.40088600e-01 1.40088600e-01 1.28657870e-01 1.55305865e-02 3.19737791e-01 2.76377914e-02 1.93076646e-02 4.76327783e-02 -3.78934227e-01 -1.49416228e-01 1.62516596e-02 1.49255702e-01 1.70876986e-01 4.64413603e-02	175	-1.15661689e-01	2.67179864e-01	-6.56846398e-01
2.11732811e-01 177 -1.67588169e-01 1.05260447e-01 2.51172395e-01 3.71702789e-01 178 2.83420341e-01 -5.47074427e-01 8.08181110e-02 -6.29191758e-01 179 -4.60704873e-01 2.88582736e-01 2.89287087e-01 -4.12150773e-01 180 -8.72623466e-02 2.96813099e-01 -3.04548718e-01 8.72288969e-02 181 -2.67630463e-01 -3.37235770e-03 2.48242775e-01 -4.73447998e-01 182 -8.94991947e-01 2.79974009e-01 7.62834858e-02 -2.02308099e-01 183 -1.60704495e-01 4.28705814e-02 2.33204060e-01 1.40088600e-01 1.40088600e-01 1.28657870e-01 1.55305865e-02 3.19737791e-01 2.76377914e-02 185 1.93076646e-02 4.76327783e-02 -3.78934227e-01 -1.49416228e-01 1.62516596e-02 1.49255702e-01 1.70876986e-01 4.64413603e-02		1.17371788e-01		
177 -1.67588169e-01 1.05260447e-01 2.51172395e-01 3.71702789e-01 178 2.83420341e-01 -5.47074427e-01 8.08181110e-02 -6.29191758e-01 179 -4.60704873e-01 2.88582736e-01 2.89287087e-01 -4.12150773e-01 180 -8.72623466e-02 2.96813099e-01 -3.04548718e-01 8.72288969e-02 181 -2.67630463e-01 -3.37235770e-03 2.48242775e-01 -4.73447998e-01 182 -8.94991947e-01 2.79974009e-01 7.62834858e-02 -2.02308099e-01 183 -1.60704495e-01 4.28705814e-02 2.33204060e-01 1.40088600e-01 184 1.28657870e-01 1.55305865e-02 3.19737791e-01 2.76377914e-02 185 1.93076646e-02 4.76327783e-02 -3.78934227e-01 -1.49416228e-01 186 4.11647629e-01 -1.67277110e-01 -1.60514058e-01 1.62516596e-02 187 1.49255702e-01 1.70876986e-01 4.64413603e-02	176		1.98583308e-01	1.95058353e-01
3.71702789e-01 178		2.11732811e-01		
178	177		1.05260447e-01	2.51172395e-01
-6.29191758e-01 179 -4.60704873e-01				
179	178		-5.47074427e-01	8.08181110e-02
-4.12150773e-01 180				
180	179		2.88582736e-01	2.89287087e-01
8.72288969e-02 181			/	
181	180		2.96813099e-01	-3.04548718e-01
-4.73447998e-01 182	4.04		7 78075880 07	0 (00 (000
182 -8.94991947e-01 2.79974009e-01 7.62834858e-02 -2.02308099e-01 183 -1.60704495e-01 4.28705814e-02 2.33204060e-01 1.40088600e-01 1.55305865e-02 3.19737791e-01 2.76377914e-02 185 1.93076646e-02 4.76327783e-02 -3.78934227e-01 -1.49416228e-01 4.1647629e-01 -1.67277110e-01 -1.60514058e-01 1.62516596e-02 187 1.49255702e-01 1.70876986e-01 4.64413603e-02	181		-3.37235770e-03	2.48242775e-01
-2.02308099e-01 183	400		0 0000 (000 - 04	U /007/050- 00
183 -1.60704495e-01 4.28705814e-02 2.33204060e-01 1.40088600e-01 1.55305865e-02 3.19737791e-01 2.76377914e-02 1.93076646e-02 4.76327783e-02 -3.78934227e-01 -1.49416228e-01 4.11647629e-01 -1.67277110e-01 -1.60514058e-01 1.62516596e-02 1.49255702e-01 1.70876986e-01 4.64413603e-02	182		2.79974009e-01	7.628348580-02
1.40088600e-01 184	107		/ 2070501/- 02	0 7700/0/0- 01
184	182		4.28/058140-02	Z.332U4U6UE-UI
2.76377914e-02 185	10/		1 557050/50 00	7 10777701 ~ 01
185	194		1.555058656-07	3.14/3//AT6-0T
-1.49416228e-01 186	105		/ 74707707 00	7 7007/007~ 01
186	100		4./032//038-02	-3./073422/6-01
1.62516596e-02 187 1.49255702e-01 1.70876986e-01 4.64413603e-02	104		_1 672771100 01	_1
187 1.49255702e-01 1.70876986e-01 4.64413603e-02	100		-1.0/2//1106-01	-1.000140006-01
	197		1 702740940-01	/
- 1./331/0406-01	101		1./00/07008-01	4.044130036-02
		T./JJT/U40E-UI		

File - CA2			
188	4.27715640e-02	-9.61930096e-02	-4.14614460e-02
	-2.70831912e-01		
189	-2.29728243e-01	3.92668335e-01	3.45735172e-02
	1.28492338e-01		
190	3.03510418e-01	-2.73432888e-02	-8.21095509e-02
	2.36917266e-02		
191	-1.53254350e-01	2.33070995e-01	-1.29224641e-01
	-7.18663967e-02		
192	1.75501166e-01	3.16344145e-01	3.24423544e-01
407	-1.78412999e-01	E EE433030 00	7 (00/05/0 04
193	-9.28233607e-02	-7.77133232e-02	-3.62860760e-01
10/	-2.01586714e-02	0 10007700 01	0 705710/0 01
194	-2.77944908e-02 1.74971773e-01	2.12893382e-01	2.39531048e-01
195	1.20471438e-01	/ 7700/070 ₀ 01	-1.98242460e-01
195	-1.66262732e-01	-4.3/9940396-01	-1.902424006-01
196		-7.84465708e-02	-5 37720730 ₀ -02
170	-4.16453540e-01	-7.044037006-02	-3.377277376-02
197	-2.70736125e-01	-8.14691106e-02	1.33614260e-01
1 7 7	-3.07248227e-01	0.110711000 02	1.0001 12000 01
198	-2.70550191e-01	1.21996183e-01	-1.20632988e-01
	-1.35222087e-02		
199	-6.72775355e-02	4.32831817e-01	1.75919932e-02
	4.27015814e-02		
200	7.73401615e-03	5.21399354e-02	2.44589625e-01
	4.46661144e-01		
201	1.45168720e-02	2.09399738e-01	-2.52165282e-02
	3.17177449e-01		
202		-2.70755360e-02	2.17032149e-01
	1.74677954e-01		
203	-7.45398086e-02	1.81643772e-02	-8.10600180e-02
00/	-1.85191940e-01	4 /500/044 04	4 0545//04 04
204		-1.45984211e-01	-1.851/64916-01
205	1.53070086e-01	-3.97581186e-01	1.98127978e-01
203	-2.36155075e-01	-3.9/3011006-01	1.9012/9/06-01
206		-2.67071037e-01	2.00902993e-01
200	-3.69217275e-01	2.0/0/103/6-01	2.00/02//JC-UI
207	2.87556611e-01	7.19721913e-02	8.61318590e-02
20 /	-3.54308037e-02	,.1,,21,100 02	3.010100/00 02
208	-1.58275136e-01	7.71513855e-02	1.64629627e-02
		Dags 40 of 40	

```
-2.87616570e-01
208
209
     -4.93590072e-02
                      2.29016027e-01 -2.99209781e-01
      2.95705202e-01
     -1.11077826e-02
210
                      2.41661925e-02 8.81265084e-02
     -1.98700497e-02
211
     -1.40458375e-01 4.09547783e-01 -6.03198655e-01
      3.38340038e-01
     -2.73165163e-01 -9.80498987e-02 -4.08630627e-01
212
     -3.24329791e-01
213
     -3.02480901e-01 -2.75397919e-02 -1.04605349e-01
      2.51253176e-01
214
      -1.27772661e+00 -2.12320714e-02 -5.60443019e-02
      1.84832628e-01
215
       1.51574168e-01 -3.24162947e-01 1.91075453e-01
      3.15111980e-01
       1.36088567e-01 2.63534760e-01 6.12690346e-02
216
     -1.41252327e-01
       3.67168552e-02 1.10460256e-01 -4.11475348e-01
217
      3.34510071e-01
218
       4.98138708e-02 -1.06373634e-02 -2.43116439e-01
      1.14350739e-02
       3.96942053e-02 -7.03956894e-02 -9.42165161e-02
219
     -1.80031647e-01
       3.21136363e-01
220
                      1.07279053e-01 2.11848807e-01
     -2.84468817e-01
       3.08869377e-01 2.31068313e-01 -1.29606345e-01
221
     -3.50118735e-01
     -2.86225578e-01 -1.41391495e-01 1.15011243e-02
222
      3.14167208e-01
       5.78441149e-02
                      7.03791826e-02 9.92145783e-02
223
     -1.04721755e-01
224
       1.18609696e-02 -4.43830863e-02 -1.36345240e-01
     -7.47792671e-03
       3.47418547e-02 -7.50786460e-02 -2.27192501e-01
225
     -1.28506087e-02
       6.39854248e-01 -4.37071199e-01 3.18897845e-02
226
      1.25075418e-01
227
       3.51754596e-01 -7.11488758e-01 -1.34519036e-01
     -4.16687217e-01
228
     -4.64288230e-02 3.14923878e-02 1.14872491e-01
     -1.89199583e-01
```

```
229 2.94291196e-01 -1.70101141e-01 -3.83361534e-01 -1.33051457e-01
230 -2.69988171e-01 -1.31248546e-01 6.66044093e-02 1.74532947e-01
231 -1.62821573e-01 -2.37017578e-01 9.80361435e-02 9.55398068e-03
232 1.28121263e-01 8.78651410e-02 1.17877159e-01 2.51770925e-01]]
233
234 Process finished with exit code 0
```