```
1 C:\Users\nguye\.virtualenvs\lab4_clustering\Scripts\
   python.exe "C:/Users/nquye/OneDrive/Documents/
   HpSepctrex360/GeneralClassDownloads/CSC 466/
  lab4_clustering/clustering/hclustering.py" ./data/
  mammal_milk.csv 0
 2 Cluster 0:
 3 2 points:
 4 Point: 21
                   Water
                           Protein
                                         Fat
                                               Lactose
          Ash
 5 21
      0.725951
                 0.837607
                          0.456098
                                    0.376812
                                              0.590909
 6 Point: 22
                   Water
                            Protein
                                         Fat
                                                Lactose
         Ash
 7 22
       0.713647
                                    0.362319
                 0.863248
                          0.470732
                                              0.590909
 8 Cluster 1:
 9 2 points:
10 Point: 8
                         Protein
                                        Fat
                 Water
                                              Lactose
          Ash
                0.452991 0.168293
                                   0.681159
11 8
      0.907159
                                              0.309091
12 Point: 16
                  Water
                         Protein
                                        Fat
                                              Lactose
         Ash
13 16
       0.90604
               0.42735
                        0.131707
                                  0.681159
                                            0.368182
14 Cluster 2:
15 2 points:
16 Point: 6
                         Protein
                                        Fat
                 Water
                                              Lactose
          Ash
      0.969799
17 6
                0.247863
                         0.058537
                                   0.695652
                                              0.277273
18 Point: 15
                                        Fat
                  Water
                         Protein
                                             Lactose
         Ash
19 15
      0.95302
               0.205128
                         0.092683
                                   0.768116 0.272727
20 Cluster 3:
21 3 points:
22 Point: 11
                   Water
                            Protein
                                         Fat
                                                Lactose
          Ash
23 11
      0.901566
                 0.512821
                          0.119512
                                     0.710145
                                              0.377273
24 Point: 8
                 Water
                         Protein
                                        Fat
                                              Lactose
          Ash
      0.907159
25 8
               0.452991
                         0.168293
                                   0.681159
                                              0.309091
26 Point: 16
                         Protein
                   Water
                                        Fat
                                              Lactose
         Ash
27 16
       0.90604
               0.42735
                        0.131707
                                  0.681159
                                            0.368182
28 Cluster 4:
```

File - h	nclustering					
29	2 point	ts:				
30	Point:	2	Water	Protein	Fat	Lactose
		Ash				
31	2 0.97	78747	0.068376	0.060976	0.869565	0.063636
32	Point:	3	Water	Protein	Fat	Lactose
		Ash				
33	3 0.97	77629	0.136752	0.041463	0.927536	0.036364
34	Cluster	5:				
	2 point					
	Point:		Water	Protein	Fat I	Lactose
		Ash				
37	7 0.96		0.358974	0.017073 (0.826087 (0.363636
	Point:		Water		Fat	Lactose
		 Ash				
39	12 0.9		0.282051	0.053659	0.811594	0.318182
	Cluster					
	3 point					
	Point:		Water	Protein	Fat	Lactose
		Ash				
43	4 0.99	98881	0.094017	0.009756	0.898551	0.136364
44	Point:	2	Water	Protein	Fat	Lactose
		Ash				
45	2 0.97		0.068376	0.060976	0.869565	0.063636
46	Point:	3	Water	Protein	Fat	Lactose
		Ash				
47	3 0.97		0.136752	0.041463	0.927536	0.036364
	Cluster					
	4 point					
	•		Water	Protein	Fat	Lactose
		Ash				
51	13 0.9		0.119658	0.019512	0.797101	0.168182
				Protein		
-		Ash	 - -	 	. J. -	
53	4 0.99		0.094017	0.009756	0.898551	0.136364
	Point:			Protein	Fat	
- '	· · · ·	Ash			. 3. 2	
55	2 0.97		0.068376	0.060976	0.869565	0.063636
	Point:		Water		Fat	
	· · - ·	Ash		 		
57	3 0.97		0.136752	0.041463	0.927536	0.036364
	Cluster					
		- ·				

```
59 2 points:
60 Point: 17
                  Water Protein
                                     Fat
                                           Lactose
  Ash
61 17 0.842282 0.74359
                       0.207317 0.434783 0.5
62 Point: 20
                  Water
                         Protein
                                      Fat Lactose
         Ash
63 20 0.799776
               0.735043 0.282927 0.478261 0.590909
64 Cluster 9:
65 4 points:
66 Point: 6
                                   Fat Lactose
                Water Protein
         Ash
     0.969799 0.247863 0.058537 0.695652 0.277273
68 Point: 15
                 Water Protein
                                     Fat Lactose
         Ash
69 15
      0.95302
              0.205128 0.092683
                                 0.768116 0.272727
70 Point: 7
               Water Protein
                                   Fat
                                         Lactose
         Ash
71 7
     0.96085 0.358974 0.017073 0.826087 0.363636
72 Point: 12
                  Water
                         Protein
                                      Fat Lactose
         Ash
      0.956376 0.282051 0.053659 0.811594 0.318182
73 12
74 Cluster 10:
75 5 points:
76 Point: 1
                Water Protein Fat
                                   Lactose
                                                Ash
77 1
     0.996644
              0.17094
                      0.0
                               1.0
                                   0.113636
78 Point: 13
                  Water Protein
                                      Fat Lactose
         Ash
79 13 0.995526
               0.119658 0.019512
                                 0.797101 0.168182
80 Point: 4
                Water Protein
                                    Fat Lactose
         Ash
81 4
     0.998881
              0.094017
                       0.009756
                                 0.898551
                                          0.136364
82 Point: 2
                       Protein
                Water
                                    Fat
                                          Lactose
         Ash
     0.978747
83 2
                                 0.869565
              0.068376
                       0.060976
                                          0.063636
84 Point: 3
                Water
                       Protein
                                    Fat
                                          Lactose
         Ash
     0.977629 0.136752 0.041463 0.927536 0.036364
85 3
86 Cluster 11:
87 2 points:
88 Point: 9
                       Protein
                Water
                                   Fat
                                         Lactose
         Ash
```

```
89 9 0.904922 0.581197 0.15122 0.391304 0.340909
90 Point: 14 Water Protein Fat Lactose
        Ash
91 14 0.914989 0.555556 0.1 0.536232 0.454545
92 Cluster 12:
93 7 points:
94 Point: 11
             Water Protein Fat Lactose
         Ash
95 11 0.901566 0.512821 0.119512 0.710145 0.377273
96 Point: 8 Water Protein
                                Fat Lactose
        Ash
97 8 0.907159 0.452991 0.168293 0.681159 0.309091
98 Point: 16 Water Protein Fat Lactose
        Ash
99 16 0.90604 0.42735 0.131707 0.681159 0.368182
100 Point: 6 Water Protein Fat Lactose
        Ash
101 6 0.969799 0.247863 0.058537 0.695652 0.277273
102 Point: 15 Water Protein Fat Lactose
        Ash
103 15 0.95302 0.205128 0.092683 0.768116 0.272727
104 Point: 7 Water Protein Fat Lactose
         Ash
105 7 0.96085 0.358974 0.017073 0.826087 0.363636
106 Point: 12 Water Protein Fat Lactose
        Ash
107 12 0.956376 0.282051 0.053659 0.811594 0.318182
108 Cluster 13:
109 4 points:
110 Point: 17 Water Protein Fat Lactose
    Ash
111 17 0.842282 0.74359 0.207317 0.434783 0.5
112 Point: 20
             Water Protein Fat Lactose
         Ash
113 20 0.799776 0.735043 0.282927 0.478261 0.590909
114 Point: 9 Water Protein Fat Lactose
         Ash
115 9 0.904922 0.581197 0.15122 0.391304 0.340909
116 Point: 14 Water Protein Fat Lactose
         Ash
117 14 0.914989 0.555556 0.1 0.536232 0.454545
```

```
118 Cluster 14:
119 2 points:
120 Point: 24 Water Protein Fat Lactose
   Ash
121 24 0.50783 0.777778 1.0 0.0 0.340909
122 Point: 25
                  Water Protein
                                     Fat Lactose
         Ash
123 25 0.491051 0.854701 0.826829 0.130435 0.195455
124 Cluster 15:
125 3 points:
126 Point: 23
                  Water Protein
                                     Fat Lactose
         Ash
127 23 0.713647 0.897436 0.492683 0.231884 0.340909
128 Point: 21
                 Water Protein
                                     Fat Lactose
         Ash
129 21 0.725951 0.837607 0.456098 0.376812 0.590909
130 Point: 22
                  Water Protein
                                     Fat Lactose
         Ash
131 22 0.713647 0.863248 0.470732 0.362319 0.590909
132 Cluster 16:
133 5 points:
134 Point: 10
               Water Protein
                                     Fat Lactose
         Ash
135 10 0.901566 0.811966 0.129268 0.637681 0.295455
136 Point: 17
                                   Fat Lactose
                 Water Protein
     Ash
137 17 0.842282 0.74359 0.207317 0.434783 0.5
138 Point: 20
             Water Protein Fat Lactose
         Ash
139 20 0.799776 0.735043 0.282927 0.478261 0.590909
140 Point: 9
              Water Protein Fat Lactose
         Ash
141 9 0.904922 0.581197 0.15122 0.391304 0.340909
                  Water Protein Fat Lactose
142 Point: 14
         Ash
143 14 0.914989 0.555556 0.1 0.536232 0.454545
144 Cluster 17:
145 6 points:
146 Point: 5
             Water Protein
                                Fat
                                     Lactose Ash
147 5 1.0
              0.0
                   0.085366 0.637681
148 Point: 1 Water Protein Fat Lactose
```

Tile - IICi					
	Ash				
149	1 0.996644	0.17094	9.0 1	.0 0.1136	36
150	Point: 13	Water	Protein	Fat	Lactose
	Ash				
151	13 0.995526	0.119658	0.019512	0.797101	0.168182
	Point: 4			Fat	
102	Ash	Water	1100011	1 4 5	240 2000
157		0.00/017	0 00075/	0 000551	0 17/7//
	4 0.998881				
154	Point: 2	water	Protein	Faτ	Lactose
	Ash				
155	2 0.978747	0.068376	0.060976	0.869565	0.063636
156	Point: 3	Water	Protein	Fat	Lactose
	Ash				
157	3 0.977629	0.136752	0.041463	0.927536	0.036364
	Cluster 18:	0120702		0172700	
	8 points:				
	Point: 18	Watan	Dootoin	Fat	Lactose
100		water.	FI.O CETII	гас	Lactuse
4.4	Ash	0.05//4	0 (0(070	0.044507	0.040000
	18 0.779642		0.404878		
162	Point: 11	Water	Protein	Fat	Lactose
	Ash				
163	11 0.901566	0.512821	0.119512	0.710145	0.377273
164	Point: 8	Water	Protein	Fat	Lactose
	Ash				
165	8 0.907159	0.452991	0.168293	0.681159	0.309091
166	Point: 16	Water	Protein	Fat	Lactose
	Ash				
167	16 0.90604	n 42735 (າ 131707 ເ	n 681159 i	1 368182
	Point: 6				
100	Ash	Water	TTOCCIN	rac	Lactosc
140	6 0.969799	n 2/70/7	0 050577	0 405450	n 277277
17/0	Point: 15	water	protein	Fat	Lactose
	Ash				
	15 0.95302				
172	Point: 7	Water F	Protein	Fat	Lactose
	Ash				
173	7 0.96085	9.358974 (9.017073 (9.826087	0.363636
	Point: 12				
	Ash				
175	12 0.956376	0.282051	0.053659	0.811594	0.318182
	Cluster 19:	2.20201	2.223007	2.3220,1	2.323202
			~ C of 14		

File - hclus	stering					
177	14 point	ts:				
178 I	Point: 5	5 Water	Prot	ein	Fat L	_actose Ash
179 !	5 1.0	0.0	0.08	35366 0.6	637681	0.0
180 I	Point: 1	L Wa	ater P	rotein P	at Lact	tose
	Ash					
181	1 0.996	6644 0.17	7094 0	0.0	1.0 0.11	L3636
	Point: 1		Water	Protei		
		Ash				
183	13 0.99		L19658	0.019512	2 0.7971	L01 0.168182
	Point: 4		ater	Protein	Fat	
		∖sh				
185	4 0.998		94017	0.009756	0.89855	51 0.136364
	Point: 2		ater	Protein	Fat	
		- ∖sh				
187	2 0.978		8376	0.060976	0.86956	55 0.063636
	Point: 3		ater	Protein	Fat	
	Α	\sh				
189	3 0.977	7629 0.13	36752	0.041463	0.92753	36 0.036364
	Point: 1			Protein	Fa	
		∖sh				
191	18 0.77	79642 0.2	25641	0.404878	0.81159	94 0.240909
192 I	Point: 1	11	Water	Protei	n F	at Lactose
	P	Ash				
193	11 0.90	01566 0.5	512821	0.119512	2 0.7101	L45 0.377273
194 I	Point: 8	3 Wa	ater	Protein	Fat	t Lactose
	P	∖sh				
195	8 0.907	7159 0.45	52991	0.168293	0.68115	59 0.309091
196 I	Point: 1	16 V	Vater	Protein	Fat	t Lactose
	P	∖sh				
197	16 0.90	9604 0.42	2735 C	.131707	0.681159	0.368182
198 I	Point: 6	5 Wa	ater	Protein	Fat	t Lactose
	P	∖sh				
199	6 0.969	9799 0.24	47863	0.058537	0.69565	52 0.277273
200 I	Point: 1	15 V	Vater	Protein	Fa	at Lactose
	P	∖sh				
201	15 0.95	5302 0.20	95128	0.092683	0.76811	L6 0.272727
202 I	Point: 7	7 Wat	er P	rotein	Fat	Lactose
	P	∖sh				
203 '	7 0.960	985 0.358	3974 0	.017073	0.826087	7 0.363636
204 I	Point: 1	12	Water	Protei	n F	at Lactose
	P	∖sh				
				7 -5 1 4		

i ile - ile	lustering				
205	12 0.956376	0.282051	0.053659	0.811594	0.318182
206	Cluster 20:				
207	8 points:				
208	Point: 23	Water	Protein	Fat	Lactose
	Ash				
209	23 0.713647	0.897436	0.492683	0.231884	0.340909
210	Point: 21	Water	Protein	Fat	Lactose
	Ash				
211	21 0.725951	0.837607	0.456098	0.376812	0.590909
212	Point: 22	Water	Protein	Fat	Lactose
	Ash				
213	22 0.713647	0.863248	0.470732	0.362319	0.590909
	Point: 10	Water	Protein	Fat	Lactose
	Ash	na co.		. 42	240 2000
215	10 0.901566	0.811966	0.129268	0.637681	0.295455
	Point: 17	Water	Protein	Fat	Lactose
	Ash				
217	17 0.842282	0.74359	0.207317	0.434783	0.5
	Point: 20	Water	Protein		Lactose
	Ash	na co:			2401000
219	20 0.799776	0.735043	0.282927	ი. 478261	0.590909
	Point: 9	Water	Protein		.actose
	Ash	Macor	11000111	, ac	.40 2000
221	9 0.904922	0 581197	0.15122	9.391304 G	340909
	Point: 14		Protein		ctose
	Ash	Water	1100011	rac Lac	, 2030
223	14 0.914989	0 55556	01 05 ⁻	36232 በ ፊ ም	34545
	Cluster 21:	0.00000	0.1 0.0	30202 0:40	7-10-10
	9 points:				
	Point: 19	Water	Protein	Fat	Lactosa
220	Ash	Water	11000111	1 4 6	Lactosc
227	19 0.786353	1	ቦ 205122	n 275342	1 0
	Point: 23				
220	Ash	water	LIOCETH	гац	Lactose
220	23 0.713647	n 207/34	n //02/82	n 23100/	0 3/0000
	Point: 21		Protein		Lactose
230	Ash	water.	LIOCETII	гац	Lactuse
271	21 0.725951	በ ደ374በ7	0 727000	በ 374010	<u>ი ნ</u> იიიი
	Point: 22		Protein		Lactose
202	Ash	water	LIOCETH	гас	Lactose
222	22 0.713647	በ ይለፈጋለዕ	0 /7073 2	n 349310	n 500000
200	22 U./1JU4/	0.003240	0.4/0/32	0.302317	0.370707

File - hcl	lustering				
234	Point: 10	Water	Protein	Fat	Lactose
	Ash				
235	10 0.901566	0.811966	0.129268	0.637681	0.295455
	Point: 17		Protein		
230	Ash	Water	LIOCETII	rac	Lactose
075		0 5/750	0 000745	0 /7/507	0 5
	17 0.842282				
238	Point: 20	Water	Protein	Fat	Lactose
	Ash				
239	20 0.799776	0.735043	0.282927	0.478261	0.590909
240	Point: 9	Water	Protein	Fat I	_actose
	Ash				
241	9 0.904922	0.581197	0.15122	3.391304 (0.340909
	Point: 14			Fat Lac	
_ '-	Ash	na cor	1100011	1 4 2 24	3 2 3 3 3
243	14 0.914989	0.555556	0.1 0.53	36232 0.4!	54545
	Cluster 22:	0.00000	0.1	30202 0.10	3 10 10
	11 points:				
	Point: 24	Watan	Protoin	Fat Lacto	200
240		water.	FI.O CETII	rat Lacti	JSE
0.45	Ash	0 555550	4 0	2 2 2 7 7 7	200
	24 0.50783				
248	Point: 25	Water	Protein	Fat	Lactose
	Ash				
249	25 0.491051	0.854701	0.826829	0.130435	0.195455
250	Point: 19	Water	Protein	Fat	Lactose
	Ash				
251	19 0.786353	1.0	0.295122	0.275362	1.0
252	Point: 23	Water	Protein	Fat	Lactose
	Ash				
253	23 0.713647	0.897436	0.492683	0.231884	0.340909
	Point: 21				
207	Ash	Water	11000111	rac	Lactose
255	21 0.725951	በ ወ374በ7	0 724000	በ 37401ን	0 500000
256	Point: 22	Water	Protein	Fat	Lactose
	Ash	0 0/=-:-	o		0 50000
	22 0.713647				
258	Point: 10	Water	Protein	Fat	Lactose
	Ash				
259	10 0.901566	0.811966	0.129268	0.637681	0.295455
260	Point: 17	Water	Protein	Fat	Lactose
	Ash				
261	17 0.842282	0.74359	0.207317	0.434783	0.5
					

File - hcl	lustering				
262	Point: 20	Water	Proteir	n Fat	Lactose
263	Ash 20 0.799776	n 7350/3	n 292025	7	0 500000
264	Point: 9 Ash	water	Protein	Fat	Lactose
265	9 0.904922	0.581197	0.15122	0.391304	0.340909
266	Point: 14	Water	Proteir	n Fat La	ctose
	Ash				
267	14 0.914989	0.555556	0.1 0.5	36232 0.4	54545
268	Cluster 23:				
269	25 points:				
270	Point: 5	Water Pro	tein	Fat Lac	tose Ash
271	5 1.0	0.0 0.08	85366 0.6	37681 0.0	
272	Point: 1	Water I	Protein F	at Lactos	е
	Ash		_		
273	1 0.996644	0.17094	9.0 1	L.O 0.1136	36
	Point: 13				
	Ash	na con	110001		240 2000
275	13 0.995526	0.119658	0.019512	0.797101	0.168182
	Point: 4			Fat	
270	Ash	Water	11000111	rac	Lactose
277	4 0.998881	0.094017	0.009756	0.898551	0.136364
278	Point: 2	Water	Protein	Fat	Lactose
	Ash				
279	2 0.978747	0.068376	0.060976	0.869565	0.063636
280	Point: 3	Water	Protein	Fat	Lactose
	Ash				
281	3 0.977629	0.136752	0.041463	0.927536	0.036364
282	Point: 18	Water	Protein	Fat	Lactose
	Ash				
	18 0.779642				
284	Point: 11	Water	Proteir	n Fat	Lactose
	Ash				
285	11 0.901566	0.512821	0.119512	0.710145	0.377273
286	Point: 8	Water	Protein	Fat	Lactose
	Ash				
287	8 0.907159	0.452991	0.168293	0.681159	0.309091
288	Point: 16	Water	Protein	Fat	Lactose
	Ash				
289	16 0.90604	0.42735	0.131707	0.681159	0.368182
	Point: 6				
			10 of 14		

File - nc					
290	Ash				
291	6 0.969799	0.247863	0.058537	0.695652	0.277273
292	Point: 15	Water	Protein	Fat	Lactose
	Ash				
293	15 0.95302	0.205128	0.092683	0.768116	0.272727
294	Point: 7	Water F	Protein	Fat	Lactose
	Ash				
295	7 0.96085 (0.358974 (0.017073	0.826087	0.363636
	Point: 12				
	Ash	na co.			240 2000
297	12 0.956376	0 282051	0 053650	ቦ 81150/	ค
	Point: 24				
270	Ash	Water	LIOCETII	iat Lacti	036
200		0 777770	1 0	0 0 0 7/0	200
	24 0.50783				
300	Point: 25	water	Protein	Fat	Lactose
704	Ash	0 05 (504	0.001000	0.470/75	0.405/55
	25 0.491051				
302	Point: 19	Water	Protein	Fat	Lactose
	Ash				
	19 0.786353				
304	Point: 23	Water	Protein	Fat	Lactose
	Ash				
305	23 0.713647	0.897436	0.492683	0.231884	0.340909
306	Point: 21	Water	Protein	Fat	Lactose
	Ash				
307	21 0.725951	0.837607	0.456098	0.376812	0.590909
308	Point: 22	Water	Protein	Fat	Lactose
	Ash				
309	22 0.713647	0.863248	0.470732	0.362319	0.590909
310	Point: 10	Water	Protein	Fat	Lactose
	Ash				
311	10 0.901566	0.811966	0.129268	0.637681	0.295455
	Point: 17				
	Ash	na co.		1 4 2	240 2000
313	17 0.842282	ი. 74359	0.207317	0.434783	0.5
	Point: 20				
214	Ash	water	LIOCETII	ıat	Lactuse
315	20 0.799776	በ ማጃፍበ/ጃ	n 282027	A 79741	A FORORO
210	Point: 9	warer,	LI.O LGTII	rat	Lautuse
740	Ash	0 504407	0 15100	0 701707	0.7/0000
21/	9 0.904922	/ אדדאנים	U.13122	U.3913U4	.548787

File - hcli	ustering						
318	Point: 14	Water	Protein	ı Fat La	actose		
	Ash						
	14 0.914989	0.555556	0.1 0.5	36232 0.4	454545		
	O Cluster 24:						
	26 points:						
					e Ash		
	0.0 0.0						
	Point: 5 \						
		0.0 0.08					
326	Point: 1	Water R	Protein F	at Lactos	Se		
	Ash						
	1 0.996644						
328	Point: 13 Ash	Water	Protein	ı Fat	t Lactose		
329	13 0.995526	0.119658	0.019512	0.797101	1 0.168182		
330	Point: 4	Water	Protein	Fat	Lactose		
	Ash						
331	4 0.998881	0.094017	0.009756	0.898551	0.136364		
332	Point: 2	Water	Protein	Fat	Lactose		
	Ash						
333	2 0.978747	0.068376	0.060976	0.869565	0.063636		
334	Point: 3	Water	Protein	Fat	Lactose		
	Ash						
	3 0.977629						
336	Point: 18	Water	Protein	Fat	Lactose		
	Ash						
	18 0.779642						
338	Point: 11	Water	Protein	r Fat	t Lactose		
	Ash						
	11 0.901566						
340	Point: 8 Ash	Water	Protein	Fat	Lactose		
341	8 0.907159	0.452991	0.168293	0.681159	0.309091		
	Point: 16						
	Ash	-		-	-		
343	16 0.90604	0.42735	9.131707	0.681159	0.368182		
344	Point: 6	Water	Protein	Fat	Lactose		
	Ash						
345	6 0.969799	0.247863	0.058537	0.695652	0.277273		
346	Point: 15	Water	Protein	Fat	Lactose		
	Ash						

```
347 15 0.95302 0.205128 0.092683 0.768116 0.272727
348 Point: 7 Water Protein Fat Lactose
        Ash
349 7 0.96085 0.358974 0.017073 0.826087 0.363636
             Water Protein Fat Lactose
350 Point: 12
        Ash
351 12 0.956376 0.282051 0.053659 0.811594 0.318182
               Water Protein Fat Lactose
352 Point: 24
   Ash
353 24 0.50783 0.777778 1.0 0.0 0.340909
354 Point: 25 Water Protein Fat Lactose
        Ash
355 25 0.491051 0.854701 0.826829 0.130435 0.195455
356 Point: 19
               Water Protein Fat Lactose
    Ash
357 19 0.786353 1.0 0.295122 0.275362 1.0
358 Point: 23 Water Protein Fat Lactose
        Ash
359 23 0.713647 0.897436 0.492683 0.231884 0.340909
360 Point: 21
               Water Protein
                                 Fat Lactose
        Ash
361 21 0.725951 0.837607 0.456098 0.376812 0.590909
362 Point: 22 Water Protein
                                   Fat Lactose
        Ash
363 22 0.713647 0.863248 0.470732 0.362319 0.590909
             Water Protein
364 Point: 10
                                   Fat Lactose
        Ash
365 10 0.901566 0.811966 0.129268 0.637681 0.295455
366 Point: 17 Water Protein
                                Fat Lactose
    Ash
367 17 0.842282 0.74359 0.207317 0.434783 0.5
368 Point: 20 Water Protein Fat Lactose
         Ash
369 20 0.799776 0.735043 0.282927 0.478261 0.590909
370 Point: 9 Water Protein Fat Lactose
         Ash
371 9 0.904922 0.581197 0.15122 0.391304 0.340909
372 Point: 14 Water Protein Fat Lactose
        Ash
373 14 0.914989 0.555556 0.1 0.536232 0.454545
374
```

375 376	Process	finished	with	exit	code	0
370						