Trabajo Práctico N°1

Algoritmos Genéticos

Rafael Verde

Braian Villasanti

Cromosoma máximo:

`11111111111101110101011000011`1

Probabilidad de crossover: 0.75 **Probabilidad de mutacion:** 0.05

Tablas de valores

Generación	Máximos	Mínimos	Promedios
1	0.899552	0.000128	0.389854
2	0.899552	0.000551	0.328931
3	0.952046	0.000551	0.466322
4	0.952046	0.000242	0.561442
5	0.951976	0.000242	0.626910
6	0.983875	0.000128	0.557975
7	0.987924	0.000128	0.402868
8	0.899552	0.000128	0.250738
9	0.899552	0.005847	0.459157
10	0.993940	0.003864	0.399667
11	0.993940	0.040913	0.421841
12	0.899552	0.047072	0.368129
13	0.899552	0.047072	0.411647
14	0.951976	0.047072	0.452177
15	0.987924	0.047072	0.513682
16	0.899552	0.047072	0.466307
17	0.899552	0.002046	0.410867
18	0.992179	0.054473	0.547966
19	0.899552	0.054473	0.434674
20	0.980805	0.054473	0.530411
21	0.899552	0.049775	0.490278
22	0.899552	0.049775	0.316254
23	0.987901	0.062405	0.480386
24	0.987901	0.048064	0.401680
25	0.987901	0.024431	0.347245
26	0.987901	0.000240	0.346119
27	0.899552	0.000240	0.347133

28	0.899552	0.000240	0.335614
29	0.991926	0.003864	0.413165
30	0.991926	0.003864	0.735426
31	0.987924	0.000242	0.580826
32	0.899552	0.001702	0.359022
33	0.899552	0.001701	0.384620
34	0.961666	0.001701	0.402727
35	0.968901	0.001701	0.451953
36	0.973207	0.061264	0.553556
37	0.973207	0.018106	0.389488
38	0.968901	0.061264	0.471917
39	0.968901	0.061264	0.449795
40	0.956800	0.013551	0.546791
41	0.967941	0.013551	0.613578
42	0.949611	0.054233	0.485414
43	0.998045	0.167475	0.571439
44	0.992190	0.167475	0.610529
45	0.992190	0.148632	0.636307
46	0.992160	0.245889	0.691872
47	0.966446	0.145794	0.466427
48	0.934671	0.002641	0.308603
49	0.938385	0.015457	0.631459
50	0.968513	0.015457	0.584317
51	0.984413	0.015367	0.684286
52	0.977772	0.011737	0.706728
53	0.977772	0.011737	0.527563
54	0.977772	0.011737	0.471572
55	0.977772	0.011737	0.445532
56	0.977772	0.035521	0.556830
57	0.895851	0.015357	0.323858
58	0.934624	0.015357	0.341277
59	0.934624	0.015357	0.310977
60	0.895851	0.008869	0.349351
61	0.965628	0.000060	0.376946
62	0.895851	0.000060	0.529664
63	0.932132	0.000060	0.654620
64	0.967067	0.006734	0.655989
65	0.967067	0.052192	0.545242
66	0.951986	0.049933	0.398458
67	0.993268	0.049933	0.492726
68	0.993268	0.022984	0.445238
69	0.952241	0.022984	0.544621
70	0.952241	0.000957	0.536498
71	0.956800	0.000972	0.641435
72	0.998636	0.000972	0.694687

73	0.980805	0.000074	0.660719
74	0.980805	0.000972	0.528672
75	0.980805	0.230609	0.657813
76	0.996091	0.134465	0.644466
77	0.994149	0.080086	0.503313
78	0.994149	0.033617	0.449504
79	0.994149	0.056418	0.456941
80	0.994149	0.028329	0.536890
81	0.984430	0.028329	0.718472
82	0.984430	0.000003	0.505923
83	0.984430	0.000003	0.486135
84	0.953548	0.000003	0.364271
85	0.953548	0.000242	0.346545
86	0.953548	0.003823	0.408854
87	0.953548	0.003823	0.531927
88	0.949737	0.061466	0.554994
89	0.949737	0.000948	0.530004
90	0.933461	0.000948	0.437720
91	0.933461	0.000948	0.375927
92	0.895851	0.008415	0.374121
93	0.895851	0.008415	0.475589
94	0.895851	0.008414	0.324684
95	0.895851	0.008414	0.354615
96	0.967018	0.047159	0.558438
97	0.967018	0.054510	0.661216
98	0.967018	0.049344	0.567807
99	0.967018	0.049344	0.496538
100	0.989273	0.049344	0.473197
101	0.895851	0.005080	0.313175
102	0.987924	0.005080	0.373108
103	0.987924	0.005080	0.324229
104	0.991811	0.015351	0.495324
105	0.991811	0.060654	0.530623
106	0.991811	0.113492	0.591299
107	0.991811	0.028862	0.494893
108	0.995671	0.028862	0.613315
109	0.899552	0.015333	0.376414
110	0.899552	0.015333	0.261168
111	0.991239	0.000421	0.359385
112	0.991239	0.015333	0.380819
113	0.899552	0.015333	0.259909
114	0.982825	0.015333	0.436195
115	0.982825	0.005075	0.443004
116	0.982825	0.062484	0.536698

117	0.982825	0.003121	0.366463
118	0.982825	0.003121	0.396771
119	0.982825	0.003121	0.490553
120	0.980551	0.003121	0.507056
121	0.915679	0.019249	0.419718
122	0.899552	0.005081	0.323930
123	0.997986	0.054346	0.488016
124	0.902173	0.054346	0.353048
125	0.914555	0.054346	0.478617
126	0.914555	0.054586	0.471431
127	0.914555	0.038081	0.443013
128	0.914555	0.038081	0.519030
129	0.914555	0.009484	0.412847
130	0.936404	0.145015	0.540039
131	0.946028	0.204435	0.673131
132	0.946028	0.093553	0.519669
133	0.946028	0.247306	0.543836
134	0.984042	0.090341	0.542462
135	0.993615	0.075267	0.548000
136	0.993615	0.075267	0.479505
137	0.998414	0.096799	0.558619
138	0.975870	0.134670	0.442498
139	0.922437	0.134670	0.437867
140	0.922437	0.046725	0.457545
141	0.922437	0.134670	0.406617
142	0.967306	0.134670	0.500101
143	0.967306	0.123232	0.574657
144	0.968825	0.123232	0.599706
145	0.968825	0.036511	0.596650
146	0.971872	0.000003	0.542438
147	0.975870	0.062714	0.627852
148	0.968825	0.250733	0.624369
149	0.929494	0.042783	0.554720
150	0.945112	0.000010	0.587255
151	0.945112	0.000010	0.577198
152	0.945112	0.020286	0.459170
153	0.945112	0.012252	0.386778
154	0.929494	0.012252	0.352672
155	0.929494	0.000239	0.351677
156	0.937959	0.000239	0.517344
157	0.937959	0.000239	0.593427
158	0.984193	0.019310	0.618379
159	0.984193	0.153954	0.647259
160	0.933402	0.153954	0.618337
161	0.970676	0.153954	0.593472

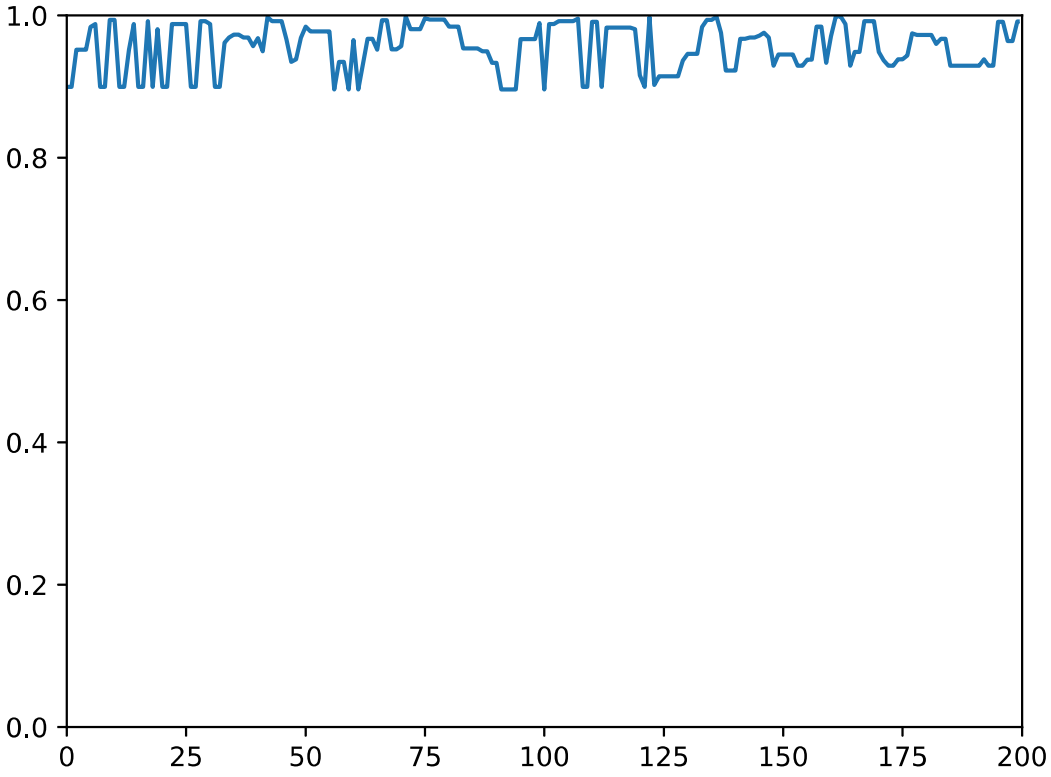
162	0.998943	0.235085	0.653743
163	0.998943	0.218783	0.624383
164	0.987981	0.084388	0.591300
165	0.929494	0.129017	0.418624
166	0.948851	0.008116	0.422846
167	0.948851	0.008116	0.415636
168	0.991981	0.008116	0.563559
169	0.991981	0.206201	0.663749
170	0.991981	0.164823	0.600264
171	0.948851	0.041206	0.584198
172	0.936882	0.214690	0.519556
173	0.929494	0.001926	0.368597
174	0.929494	0.001926	0.372805
175	0.938211	0.001926	0.465912
176	0.938211	0.001926	0.550234
177	0.944031	0.001926	0.633136
178	0.974710	0.245080	0.692938
179	0.972467	0.010564	0.709964
180	0.972467	0.010564	0.630997
181	0.972467	0.010564	0.609879
182	0.972467	0.007772	0.571525
183	0.959976	0.036189	0.435581
184	0.967024	0.036189	0.560032
185	0.967024	0.020322	0.477527
186	0.929508	0.020322	0.458159
187	0.929508	0.020322	0.506808
188	0.929508	0.003386	0.384760
189	0.929508	0.003386	0.489686
190	0.929508	0.014752	0.531100
191	0.929508	0.000220	0.412009
192	0.929508	0.000220	0.359500
193	0.938411	0.000220	0.541355
194	0.929508	0.000220	0.371843
195	0.929508	0.000220	0.453304
196	0.991029	0.035475	0.487262
197	0.991029	0.007985	0.516116
198	0.964204	0.000026	0.524596
199	0.964204	0.000026	0.455026
200	0.991399	0.000026	0.465095

Valores para las 20, 100, y 200 corridas

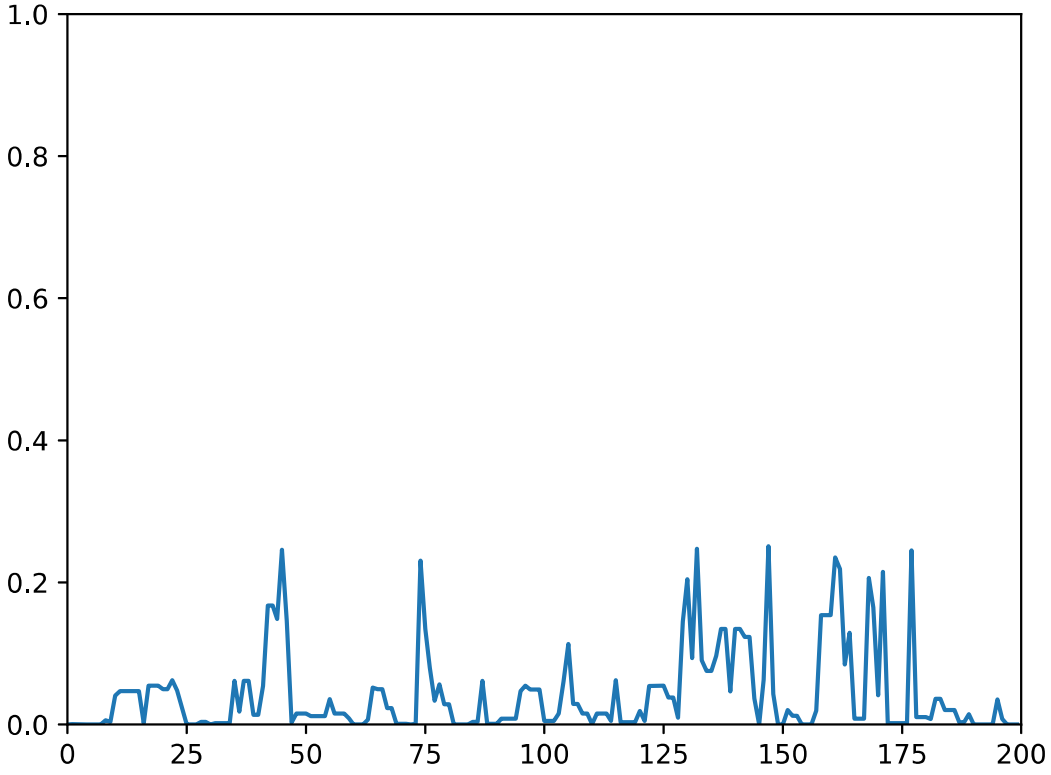
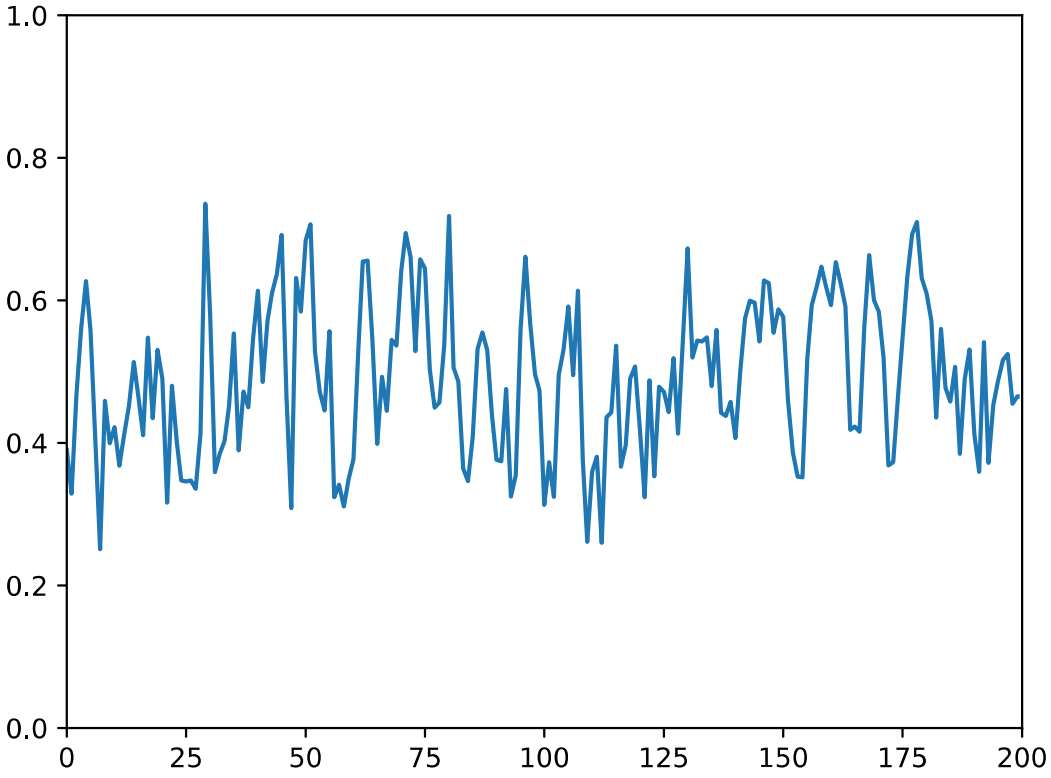
Generación	Máximos	Mínimos	Promedios

20	0.980805	0.054473	0.530411
100	0.989273	0.049344	0.473197
200	0.991399	0.000026	0.465095

Máximos



Mínimos



Promedios