

```

180 Console.WriteLine ("The test model has a population of: " + test_model.total_pop);
181 Console.WriteLine ("Testing infection method.");
182
183 susceptible_data.Add (0, test_model.get_susceptible_count ());
184 infected_data.Add (0, test_model.get_infected_count ());
185 recovered_data.Add (0, test_model.get_recovered_count ());
186
187 test_model.infect_and_recover ();
188
189
190 int t = 1;
191 while (test_model.get_recovered_count() != 100000) {
192
193     test_model.infect_and_recover ();
194
195     susceptible_data.Add (t, test_model.get_susceptible_count ());
196     infected_data.Add (t, test_model.get_infected_count ());
197     recovered_data.Add (t, test_model.get_recovered_count ());
198
199     t = t + 1;
200
201 }
202
203
204 using (var writer_s = new StreamWriter ("/Users/mateovargas/Documents/Dissertation/data/susceptible.csv")) {
205
206     for (int x = 0; x < susceptible_data.Count; x++) {
207         string item_one_s = x.ToString();
208         string item_two_s = susceptible_data[x].ToString();
209         string line = string.Format ("{0}, {1}", item_one_s, item_two_s);
210         writer_s.WriteLine (line);
211         writer_s.Flush ();
212     }
213 }
214
215
216 using (var writer_i = new StreamWriter ("/Users/mateovargas/Documents/Dissertation/data/infected.csv")) {
217
218     for (int x = 0; x < infected_data.Count; x++) {
219         string item_one_i = x.ToString();
220         string item_two_i = infected_data[x].ToString();
221         string line = string.Format ("{0}, {1}", item_one_i, item_two_i);
222         writer_i.WriteLine (line);
223         writer_i.Flush ();
224     }
225 }

```