

```

92         return recovery_rate;
93     }
94
95     //Method to set the number of susceptible individuals.
96     public void set_susceptible_count(int susceptible){
97
98         susceptible_count = susceptible;
99     }
100
101     //Method to set the number of infected individuals.
102     public void set_infected_count(int infected){
103
104         infected_count = infected;
105     }
106
107     //Method to set the number of recovered individuals.
108     public void set_recovered_count(int recovered){
109
110         recovered_count = recovered;
111     }
112
113     //Method to set the contact rate.
114     public void set_contacts(double b){
115
116         contacts = b;
117     }
118
119     //Method to set the recovery rate.
120     public void set_recovery_rate(double k){
121
122         recovery_rate = k;
123     }
124
125     //Method to infect and recover a certain amount of people on the given day.
126     public void infect_and_recover(){
127
128         //THIS WILL CHANGE WHEN SWITCHING TO THE GAME. WILL BE BASED ON ACTUAL GAME COLLISIONS
129         double rate_of_infection = -(contacts) * ((double)susceptible_count / (double)total_pop) * (infected_count);
130         double rate_of_recovery = recovery_rate * (infected_count);
131
132
133
134
135
136
137

```