Problem Set #6

MACSS 40000
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Problem 1

(a)

The plot is shown as following:

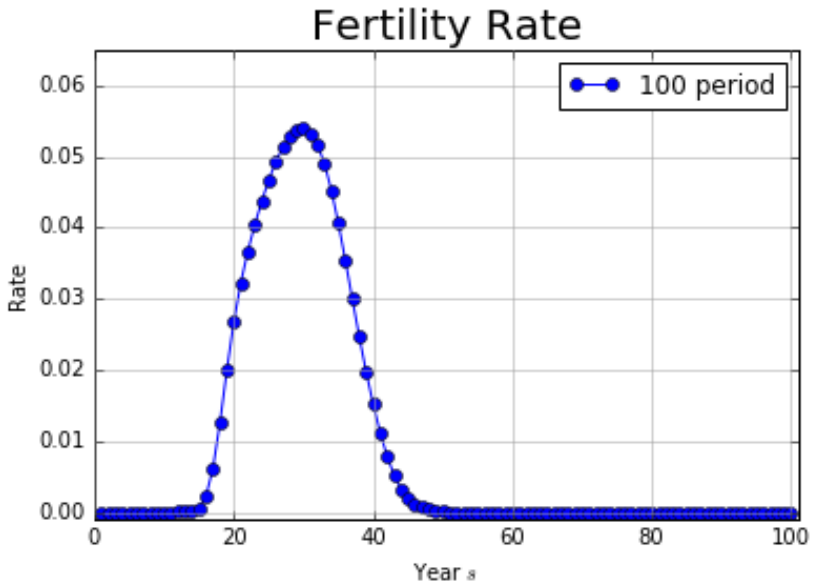

Figure 1: Fertility Rate for 100 Periods

The above graph is the fertility rate for total period equal to 100 periods.

(b)

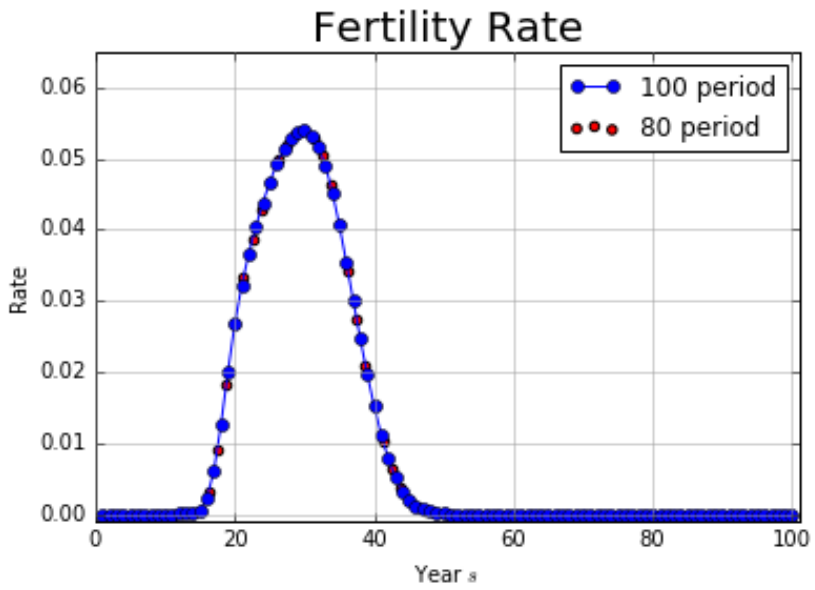

Figure 2: Fertility Rate for Period 100 and 80

The above graph is the fertility rate plot for period 100 and 80.

(c)

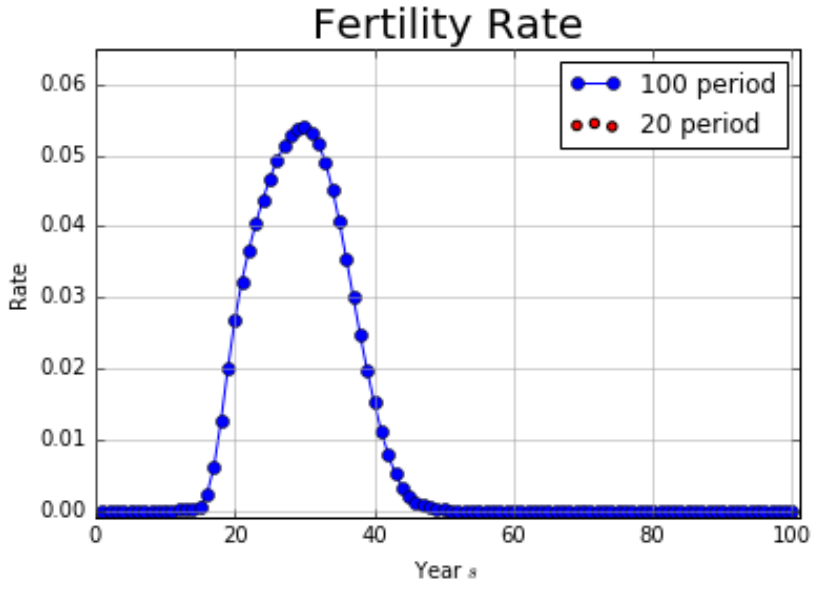

Figure 3: Fertility Rate for Period 100 and 20

The above graph is the fertility rate plot for period 100 and 20.

Problem 2

(a)

The plot is shown as following:

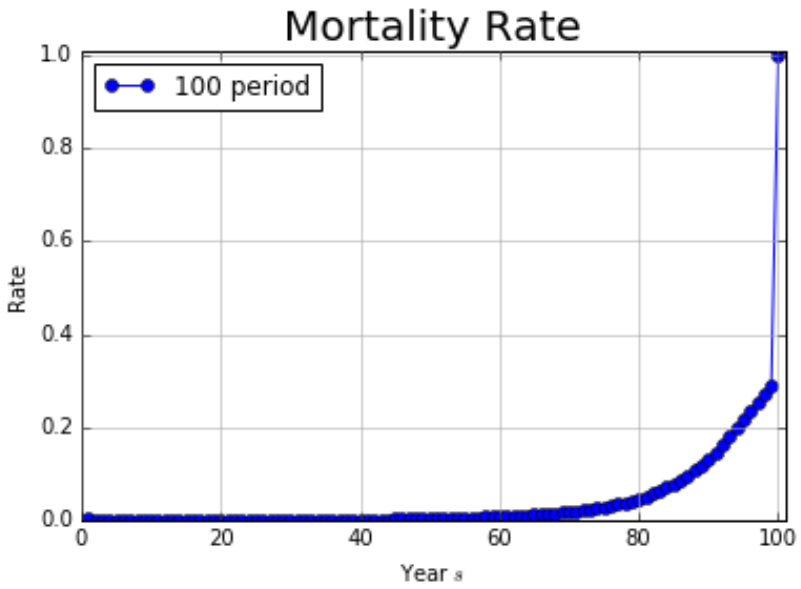

Figure 4: Mortality Rate for 100 Periods

The above graph is the mortality rate for total period equal to 100 periods.

(b)

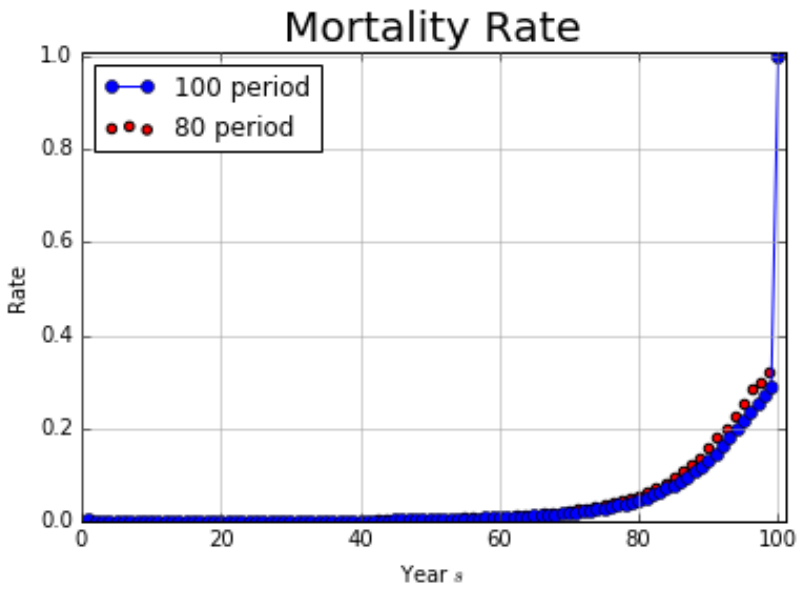

Figure 5: Mortality Rate for 100 and 80 Periods

The above graph is the mortality rate plot for period 100 and 80.

(c)

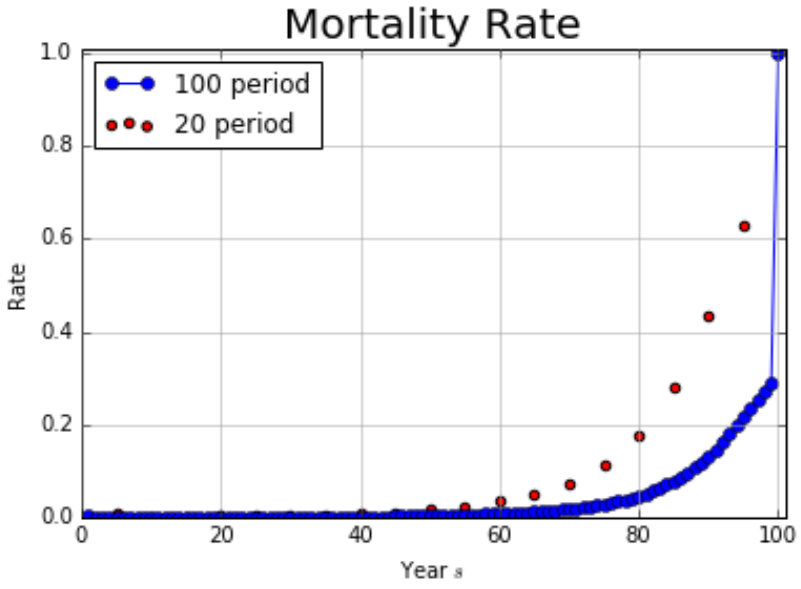

Figure 6: Mortality Rate for 100 and 20 Periods

The above graph is the mortality rate plot for period 100 and 20.

Problem 3

(a)

The plot is shown as following:

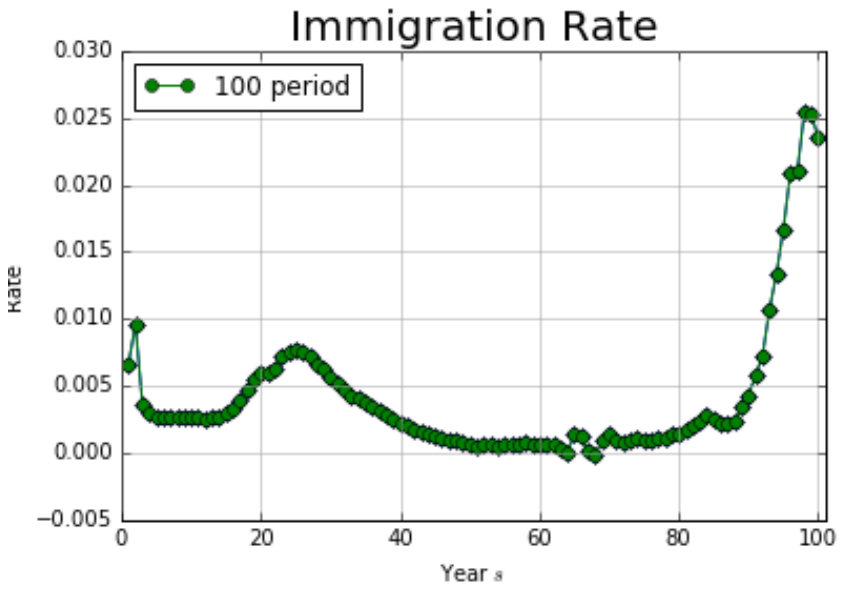

Figure 7: Immigration Rate for 100 Periods

The above graph is the immigration rate for total period equal to 100 periods.

(b)

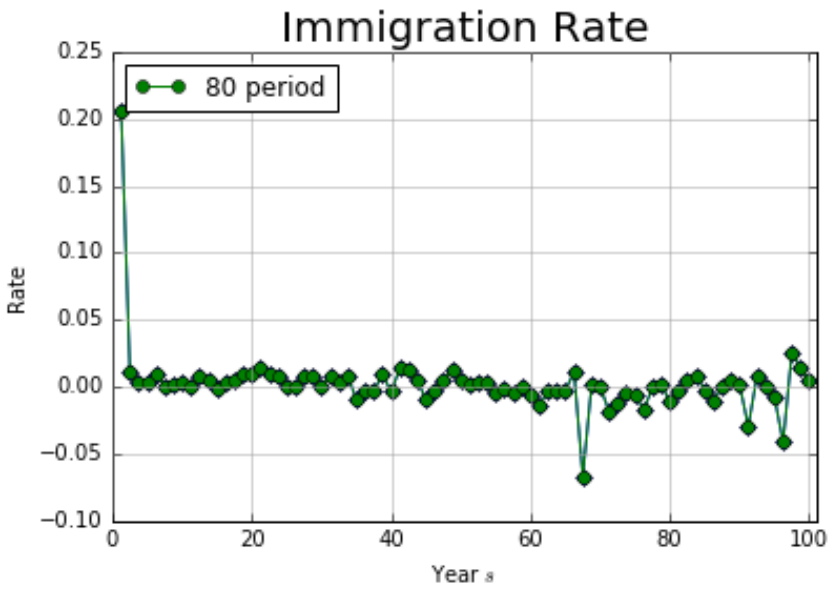

Figure 8: Fertility Rate for 80 Periods

The above graph is the immigration rate plot for period 80.

(c)

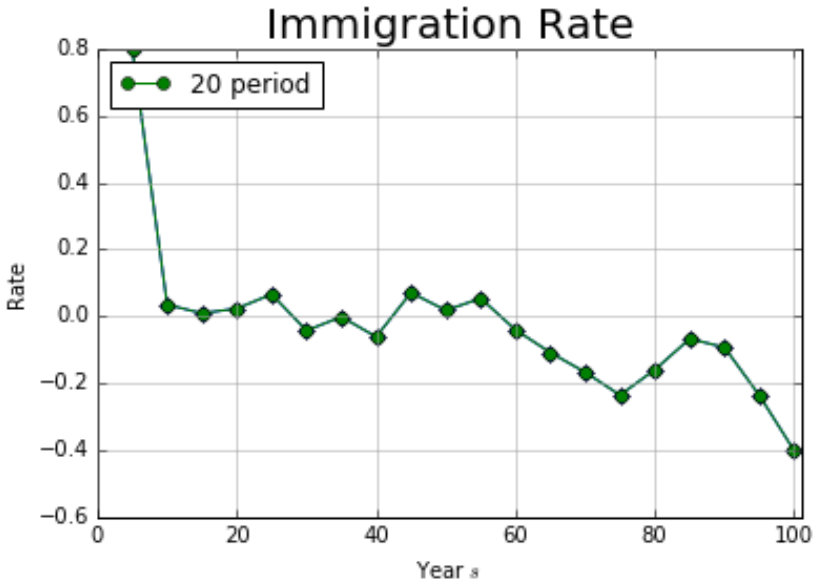

Figure 9: Fertility Rate for 20 Periods

The above graph is the immigration rate plot for period 20.

Problem 4

(a)

The plot for the stationary population distribution is shown as following:

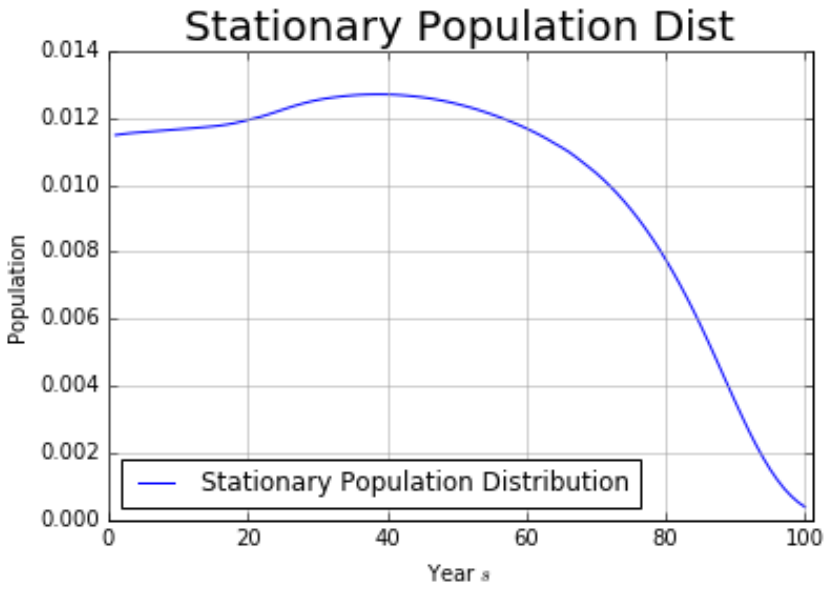

Figure 10: Stationary Population Distribution

(b)

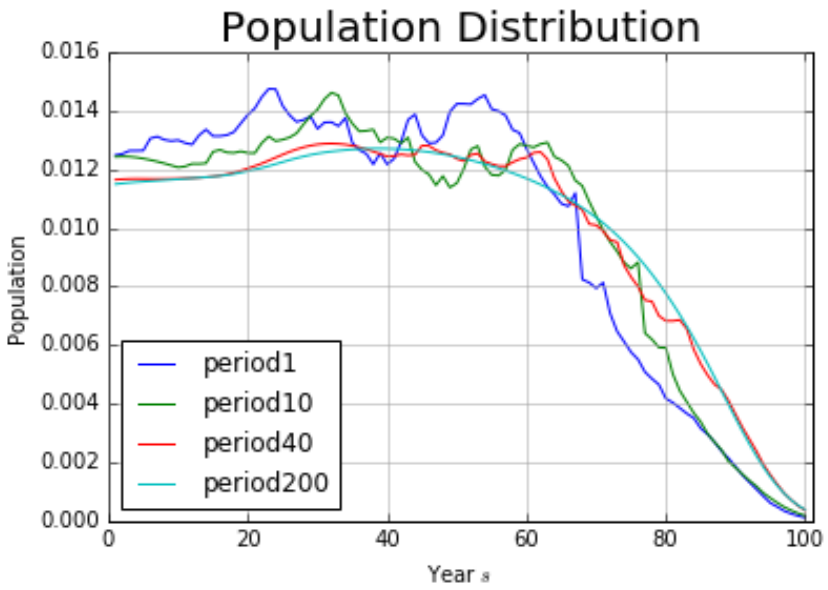

Figure 11: Population Distribution for Multiple Periods

The above graph is the population distribution for period 1, 10, 40 and 200.

(c)

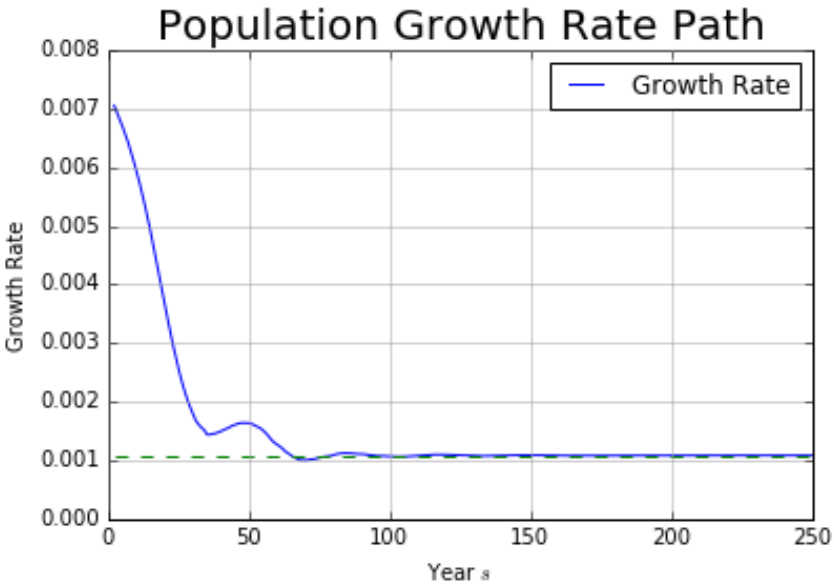

Figure 12: Population Growth Rate Time Path

The above plot is the population growth rate time path.

Problem 5

Pending

Problem 6

Pending