# CPE with Agent Based Modeling

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# Setting

The number of iterations is 100

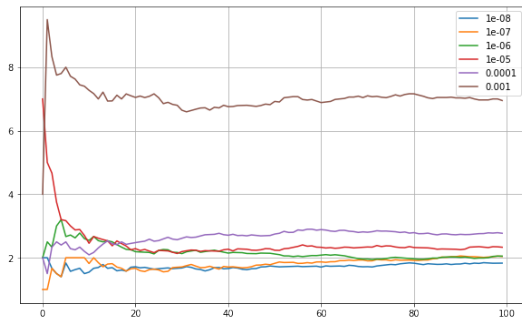| Experiment transmission rate | | | | | | |
|---|---|---|---|---|---|---|
| $\beta$ | $10^{-8}$ | $10^{-7}$ | $10^{-6}$ | $10^{-5}$ | $10^{-4}$ | $10^{-3}$ |
| patients | 1.83 | 2.04 | 2.05 | 2.33 | 2.77 | 6.95 |



Figure 1: Cummulative Average number of sick patients

# Result

It is concluded that 80 or more is appropriate for the average value to come out stably. For more stability, the number of iteration is fixed at 100.
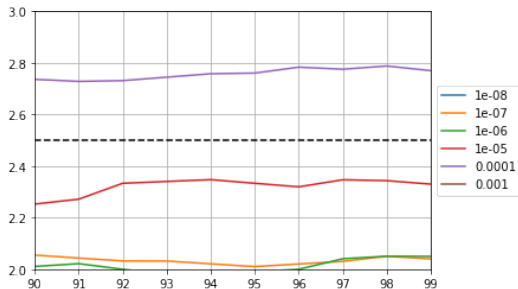


Figure 2: Cummulative Average number of sick patients

Choose the values from $10^{-5}$ to $10^{-4}$ as *transmission probability*

# Questions

- Are there any another values that depend on *transmission probability* besides the number of patients?