

Lab 6

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Why do Lab 6?

Studying S.I.R model is important because:

- The simplest epidemic model is widely used to model the spread of infectious diseases.
- Such models can show how different public health interventions may affect the outcome of the epidemic, e.g., what the most efficient technique is for issuing a limited number of vaccines in a given population.
- Models try to predict things such as how a disease spreads, or the total number infected, or the duration of an epidemic, and to estimate various epidemiological parameters such as the reproductive number.

Goal of the work

- Consider simplest compartmental model.

- Build graphs of changes in the number of individuals in each of the three groups.
- Consider how the epidemic will proceed if: $I(0) \leq I^*$.
 $I(0) > I^*$.

In the course of doing the work, I learned:

- Build graphs of changes in the number of individuals in each of the three groups with different conditions.

Thank you for the attention.