lab 6

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RUDN University, 19 March, 2021 Moscow, Russian Federation

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Who am I?

- Yakushevich Artyom Urievich.
- Since 2018, I have been studying at RUDN University in the specialty Mathematics and Computer Science.

Why do Lab 6?

- This model allows you to accurately simulate epidemics of influenza and other diseases in large cities, introduce new parameters and analyze different scenarios.
- The simplest epidemic model is widely used to model the spread of infectious diseases.
- An epidemic model of this type analyzed and simulated the course of the epidemic of the new coronavirus.

The purpose of the laboratory work

My goal is to consider the simplest model of an epidemic using the example of an epidemic problem.

Laboratory tasks

1. Construct graphs of changes in the number of individuals in each of the three groups, namely, people susceptible to the disease, but still healthy, sick people and having immunity to the disease if $ I (0) leq I ^ {*} $.
2. Construct graphs of changes in the number of individuals in each of the three groups, namely, people susceptible to the disease, but still healthy, sick people and having immunity to the disease if $ I (0)> I ^ {*} $.

Results of the laboratory work

In the process of doing laboratory work, I learned:

- to build graphs of changes in the number of individuals in each of the three groups, namely - people susceptible to the disease, but still healthy, sick people and having immunity to the disease if $ I (0) leq I ^ {*} $.
- to build graphs of changes in the number of individuals in each of the three groups, namely - people susceptible to the disease, but healthy, sick people and having immunity to the disease if $ I (0)> I ^ {*} $.

findings

As a result of the sixth laboratory work, I considered the simplest model of an epidemic using the example of an epidemic problem.