Your next task.

TODO plan:

- You need to search for information about **ExoMars 2020** (Rover only) from open sources.
- *The following information about Rover is needed*:
  - Onboard Network structure;
  - What scientific and other devices comprise the network. What do they needed for? (Functions, types of packet and communication protocols used (incl. layering)
- *SystemC Implementation of Rover Network:*
  - Switch implements only the network layer of SpW;
  - Channels need to have the parameters of speed of transmission (SpW) and error bit simulation;
  - Devices should generate and handle data from/into network with owns protocols and functions;
- *You need to implement base log-system (i think it will be the text-logging) for save the network state in any times;*
- *Parallel implementation of a system:*
  - Using the routing table split the network into 2 independent regions where traffics are independent;
  - Run it as 2 independent process through *WinAPi*. Compare modeling time of parallel model with time of single model.
  - Think about how to parallelize the system in the case of cross-traffic transmission through the network (One solution is to use the scheduling in case of traffic crossed);
  - Compare results (time of modeling and data correctness) between models (if you have successfully completed the previous item)
- *If you will have any time after previous items:*
  - *Log-system:*
    - Try to change text-logging to database-logging. Choose something what you can use (SQLite, MongoDB or other open source relational database management system).
    - Compare database-logging with old-logging. What is the best solution for current project?
  - *Topology design:*
    - Create tools for design of a network with SpW elements (Nodes, SpW Switchs and channels);
    - Data and packet will be generating from settings user (data size, start time transmit and transmit period);
    - The routing table in every switch should be automatically created when some devices connecting to the switch;
    - Implementing logical and path addresses at your discretion.