1. Introduction
    a. Access official documentation (https://drive.google.com/drive/folders/1sgG2CQcXimtivb-J_ILMTr9niWKPPdqN?usp=drive_link)
    b. Install prerequisites (VNC, see drive link above)
    c. Connect to the Raspberry Pi and run a few simple commands
2. **(1p)** Create a workspace and run a simple program
    a. catkin_make (https://wiki.ros.org/catkin/Tutorials/create_a_workspace)
    b. Hello world in python
    c. Hello world + ROS
3. **(2p)** Working with the camera
    a. Create a subscriber to the camera publisher
    b. Create a publisher with the camera frame data
    c. Draw a basic shape (circle, square, etc) on the image before publishing it and check the result
4. **(2p)** Detect the largest object of a specified color
    a. Isolate pixels of a specified color
    b. Retain the largest blob of pixels
    c. Frame the blob in a bounding box
5. **(2p)** Servo motor movement
    a. Changing stride type
    b. Changing speed
    c. Changing pitch
6. **(2p)** Movement + color detection
    a. If the robot “sees” an object of the specified color (red, green, or blue - your pick), advance until within 10-20 cm from the object, then switch to close-range tracking where the robot will change its pitch (up-down axis) to keep the object in the center of the camera

- Each team must have a git repository
- At the end of each lab, you must push your changes to git
- If a team does not complete the assignment during the current lab, they may complete it in the following labs with a penalty of 10% for each delayed calendar week