

**MEEM 4707: Autonomous system**

**Spring, 2024**

**Lab - 2**

**By**

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# **Problem 1**

Following are incorrect ROS commands. Rearrange command keywords in the correct order:

1. package\_name node\_file.py rosrun

**rosrun package\_name node\_file.py**

1. launch\_file.launch roslaunch package\_name

**roslaunch package\_name launch\_file.launch**

# **Problem 2**

What is the difference between rosrun and roslaunch commands?

**Rosrun, a command from the rosbash module, is used for running programs from the shell (BASH). Roslaunch, however, is used to launch one or more ROS nodes.**

1. Write the command to run a python node named: “test\_node.py” present in a ROS package named: “test\_package”

**rosrun test\_package test\_node.py**

1. Write the command to run a launch file named: “test.launch” present in a ROS package named: “test\_package”

**roslaunch test\_package test.launch**

# **Problem 3**

1. Move the robots using teleop command and capture the motion (You may use snipping tools. Do not take a photo of screen with a phone.)

A computer screen shot of a black screen

Description automatically generated

1. Write the maximum speed of the turtlebot.

Note: The robot can be moved by pressing the keys only if the corresponding window terminal running the teleop command is active

**Max linear velocity: 0.26**