

# COMP 3766 - Lab1 Quiz

## Question 1

1 point

What is the primary role of a node in ROS?

- a) To execute operating system commands
- b) To communicate with the ROS master
- c) To perform computation and interact with other nodes through topics and services
- d) To manage the ROS parameter server

## Question 2

1 point

In ROS, what is the purpose of a topic?

- a) To store configuration parameters
- b) To establish a communication channel for nodes to exchange messages
- c) To manage node dependencies
- d) To initialize the ROS master

## Question 3

1 point

Explain the difference between a publisher and a subscriber in ROS

- a) A publisher in a node is used to send messages to a topic, while a subscriber in a node receives messages from a topic

## Question 4

1 point

After launching the robot simulation, how can you check the status of ROS nodes that are running in the system? (*Hint: What command would you use to list the active nodes?*)

- a) The command **rostopic list** will list all active nodes in the ROS system

**Question 5****2 point**

Explain the role of Docker in this lab. Why do we use a Dev Container in VSCode to run the lab instead of directly on the operating system?

- a) Docker packs all the required tools, libraries, and configurations in a container, which creates a consistent and isolated environment for running the robot simulation. This helps us avoid issues related to student's individual machines/operating systems, etc.

The Dev Container serves as an IDE for use to run the Docker container, while still being able to use all of VSCode's integrated features