# MRT Assignment III

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## Summary

First I created a workspace `robodrive_ws`, followed by creation of packages `base_p` and `rover_p`. I built the package using `catkin_make`. Following this, I started finding the button mapping for the joystick using the terminal and `ros-joy` package. The mapping is as shown below, where the input object has array attributes `axes` and `buttons`

Now for Task 1, I created a node `base_joy_publisher` which uses the `input` module to recognise the input and publishes to the `joy_msg` rostopic. A launch file is also created for the node. Another launch file is also created to launch the `joy_node` node from the `joy` package, which would publish the inputs of the joystick onto the `joy` rostopic.

For Task 2, the subscriber node python script inside `rover_p` package, `full_drive_run.py` initiates the subscriber node. Here the callback function it calls is `driver_callback`, where the Roboclaw is manipulated according to the input from `joy` rostopic. Here I use the user functions already defined, `ForwardMixed` and `BackwardMixed` to go forward and backward. Also I use these functions alternatively to execute a turn. Also created a launch file for this subscriber node.

*Tasks 3 and 4 remain to be completed*