#!/usr/bin/env python3

import rospy

from std\_msgs.msg import String

import sys

import termios

import tty

def get\_key():

fd = sys.stdin.fileno()

old\_settings = termios.tcgetattr(fd)

try:

tty.setraw(fd)

key = sys.stdin.read(1)

finally:

termios.tcsetattr(fd, termios.TCSADRAIN, old\_settings)

return key

def key\_publisher():

rospy.init\_node('keyboard\_publisher', anonymous=True)

pub = rospy.Publisher('/motor\_commands', String, queue\_size=10)

rate = rospy.Rate(10) # 10Hz

rospy.loginfo("Control the motors using keys: i (forward), k (backward), j (left), l (right). Press 'q' to quit.")

key\_map = {

'i': 'FORWARD',

'k': 'BACKWARD',

'j': 'LEFT',

'l': 'RIGHT'

}

while not rospy.is\_shutdown():

key = get\_key()

if key == 'q':

rospy.loginfo("Exiting...")

break

if key in key\_map:

command = key\_map[key]

rospy.loginfo(f"Command: {command}")

pub.publish(command)

else:

rospy.loginfo("Invalid key pressed.")

rate.sleep()

if \_\_name\_\_ == '\_\_main\_\_':

try:

key\_publisher()

except rospy.ROSInterruptException:

pass