Link for simulation:

https://classic.gazebosim.org/tutorials?tut=install_ubuntu

ROS GZEBO PACKAGE: Simulation: 1)Install simulation Package: open a terminal and type the following: 1) mkdir -p ~/catkin_ws/src 2) cd catkin_ws/src/ 3) git clone -b kinetic-devel https://github.com/ROBOTIS-GIT/turtlbeot3_simulations.git 4) cd .. 5) catkin_make -open new terminal and type: roscore 2)Launch Simulation World: from new terminal: 1) cd catkin_ws 2)source devel/setup.bash export TURTLEBOT3_MODEL=waffle_pi 2) roslaunch turtlebot3_gazebo turtlebot3_house.launch 3)Operate TurtleBot3 open new terminal and type: 1) cd catkin_ws 2)source devel/setup.bash 3) export TURTLEBOT3_MODEL=waffle_pi 4) roslaunch turtlebot3_teleop_turtlebot3_teleop_key.launch

 $\frac{\text{https://emanual.robotis.com/docs/en/platform/turtlebot3/simulation/\#gazebo-simulation}}{\text{simulation}}$