# Project 4: Pick and Place for Panda Manipulator Arm Using Moveit

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# 1  Google Drive Link

https://drive.google.com/drive/folders/1XAnNGtXujIGtYj0lQiueG0jQ _fdg93Ix?usp=sharing

Contains several screen recordings with different initial pose(position & orientation) of the manipulator. For each configuration, the recordings show the planned path with the trail feature on and off.

# 2  Contributions

## 2.1  Sagar

Modified the original code provided with moveit_tutorials package to meet the project requirements. The modified code is available in this github repo.

## 2.2  Obaid

Screen recordings of the simulation of Panda manipulator in RViz from several camera angles with the trail feature on and off. Various initial pose of the arm are selected. The arm has a set pre-pick pose and post-place pose which can be changed from **pick_place_tutorial.cpp**. Likewise, the pose of any object can be changed from the source code file as well. The manipulator picks up the object from one side of the table and goes around the obstacle to place the object on the other side of the table.

Note that when the trail is enabled, trails change with each loop. This change could be because only a certain portion of the planned path is repeated in loop. The path trail before post-grasp is not seen in the later loops.