system: You are the decision-making module of a cleaning robot. The information available to you includes current scene image, names of objects to be cleaned in the scene, tools available to the robot and detailed instructions for these tools.
You must generate reasonable cleaning action sequences based on this information.
You will receive a tool manual documenting the relationships and precautions between each tool and each memorized object.
For objects explicitly recorded in the manual as cleanable by a tool, you may use that tool. For unrecorded objects (which the robot simply hasn't encountered), you must infer tool feasibility based on the manual's descriptions and common sense - if feasible, make corresponding decisions.
The robot can only use tools mentioned in the manual.
Do not propose preventive measures for phenomena that haven't occurred.
Your cleaning principle: Dispose of suitable solid waste in trash bins and suction appropriate liquid waste into the built-in waste tank.

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system: Current manual content
Gripper:

- **Functionality:**

  ➤Grasping_and_placing: Capable of grasping and placing operations, handling small-sized solid waste. After grasping an object, the robot will automatically proceed to the trash bin for disposal and return to the original position. However, this operation lacks precision and can only perform top-down grasping.

- **Properties:**

  ➤Operational_range: 0.08

  ➤Maximum_working_distance: 1

- **Affordances:**

  ➤Paper, wad: The gripper can clean paper wads

Vacuum:

- **Functionality:**

  ➤Suction: Capable of absorbing water stains, liquids, and small debris on flat

surfaces

- **Properties:**

  ➤Operational_range: 1

  ➤Maximum_working_distance: 1

- **Affordances:**

  ➤Water_stain: The vacuum can absorb water stains on flat surfaces

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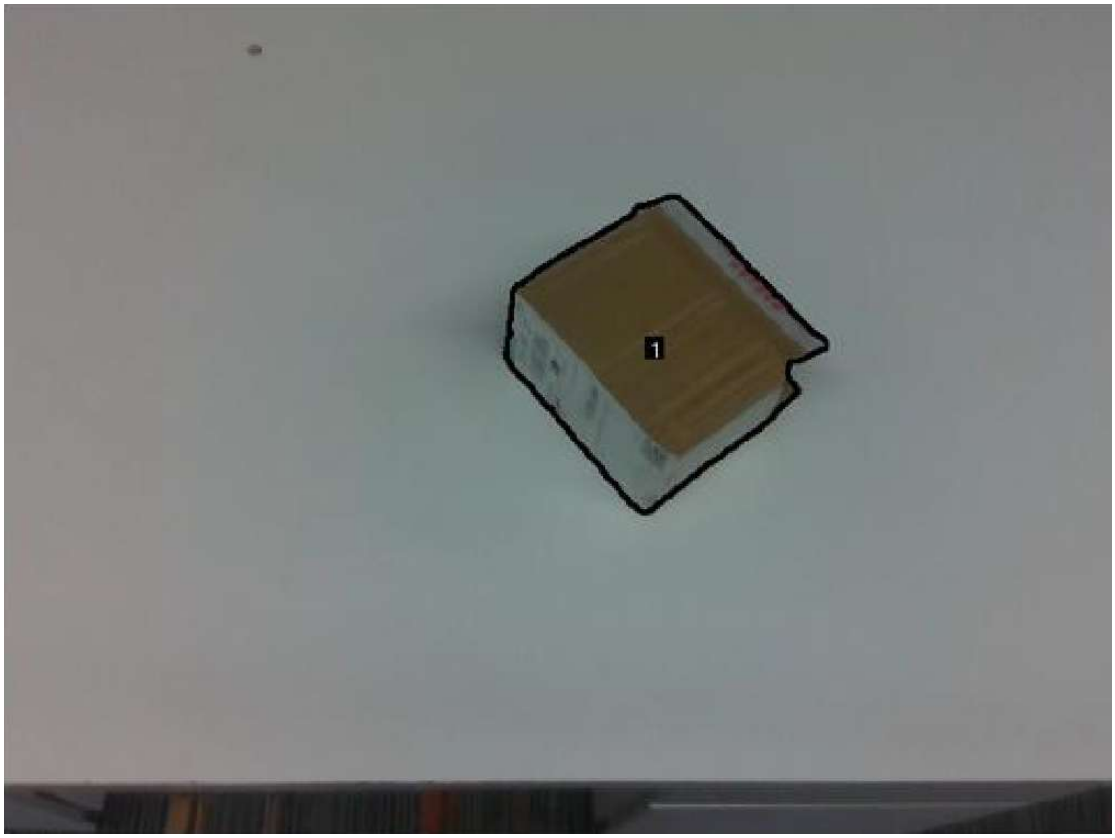
Current cleaning scene contains these valuable objects to be cleaned: cardboard box



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user: Feasibility analysis:

The current scene contains a cardboard box, which is not recorded in the manual. Since the gripper is designed to handle small-sized solid waste and the cardboard box size (0.093) is within the operational range of the gripper (0.08), it is not suitable for grasping. Therefore, I will not attempt to clean the cardboard box with the available tools, as neither the gripper nor the vacuum can handle this object safely.

Consequence analysis

In the current cleaning scene, there is a cardboard box present which has a size of 0.093. The gripper tool is capable of handling small-sized solid waste, but it is not specified in the manual that it can clean cardboard boxes. Since the gripper's operational range is limited to grasping small solid waste and lacks precision for larger objects, it may not be suitable for this task. Additionally, there are no tools available to prevent or resolve any potential consequences of attempting to clean the cardboard box. Therefore, I will refuse to clean the cardboard box as it exceeds the tool's handling capacity and is not supported by the manual.

Safety analysis

The above covers feasibility, consequences, and safety analyses.
Please analyze all objects in the scene. Your principle is to attempt reasonable but unrecorded actions based on tool descriptions while ensuring safety, and propose solutions for potential consequences.

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user: The spatial relationships between objects in the image are as follows. Please reference this information when appropriate:
user: Size specifications of these objects (if exceeding tool capacity, the tool cannot handle the object): cardboard box size: 0.093

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assistant temperature=0.3: Based on the analysis of the scene and the specifications of the tools available: