1. What wikiHow article did you pick and why?
   I chose the how to open coconut wikiHow article. The article describes different steps to open a coconut which is sort of a hard task. There were three total methods to open the coconut in this article out of which I implemented methods one and three. There were different steps in each method and each step was very distinct which is what motivated me to work on this wikiHow article. Different steps involved different kind of tools and prerequisites which made this task a sequential one.

2. What portions of the article did you select to translate to PDDL?
   I chose method one which was draining the coconut and method 3 which was opening the coconut with a mallet. Each of these methods had several steps. For example method one involved poking a hole in the coconut and flipping it upside down over a glass while method 3 involved wrapping the coconut in a towel and hitting it with a mallet to free the meat from the hard part followed by peeling it.

3. Give some examples of the actions, types, and predicates you used in your domain.
   The types I used to define the domain are coconut, wrapped coconut, broken coconut, coconut meat, peeled coconut meat, tool, container without water, container with water, towel, mallet, and peeler. I defined different predicates to determine if the coconut has its eyes poked, if the inventory has an item, if an item is a container which contains water, if an item is a broken coconut, if an item is wrapped coconut, if an item is coconut meat, if an item is peeled coconut meat. The actions I implemented are picking up an item and putting it in the inventory, poking a hole in the top of the coconut, turning the coconut upside down, wrapping the coconut, hitting the coconut with a mallet, running a knife to free the meat, removing the fiber from the meat.

4. Explain what goal you selected for your problem, and give the inital state and solution that you created.
   I selected different problems for each of the steps. For example if the inventory has a coconut which has its eyes poked, if the inventory has a filled glass of coconut water, if the inventory has a wrapped coconut, if the inventory has a broken coconut, if the inventory has coconut meat, if the inventory has the peeled coconut meat. The initial state had all the items available which could be picked. For each of the goals, separate sub goals were needed to be achieved to reach the final state. For the final problem the solution created was a sequence of steps that were carried out to get the edible peeled coconut meat.

5. What limitations of PDDL did you encounter that makes it difficult to precisely convert a wikiHow description into PDDL?
   One challenge which I faced during the task was to disable picking up the items which were final products but defined to be in the same location. To handle this problem I had to define different repetitive predicates so that different final product items like wrapped coconut, broken coconut, coconut meat etc which were final products of some sequence of actions performed, could not be directly and put in the inventory. I am not sure of

better ways to handle this but I believe there should be simpler ways of solving this problem without having to create redundant predicates.

6. Could your PDDL be used as an interesting challenge for a text-adventure-style game? If so, how? If not, what would be needed to create an interesting challenge?
   Yes, my PDDL can be used as an interesting challenge for a text adventure style game by refining its actions, types and predicates. I believe that for a text adventure game to be interesting there should be different ways of reaching a final state which is not currently present in my solution. If, somehow, there are different ways of reaching a solution and some exploratory parts which led to dead ends, an interesting text adventure based game can definitely be developed using PDDL.

7. Discuss how you might use GPT-3 to automatically or semi-automatically convert a wikiHow article to PDDL?
   If we have different prompts for different wikiHow articles in the format of the steps and methods as described in the articles, and their corresponding PDDL domain representation along with problem specifications, discord then be passed on to GPT-3 to automatically convert a wikiHow article by passing it as a prompt during inference to create the final pddl domain and problem specifications.