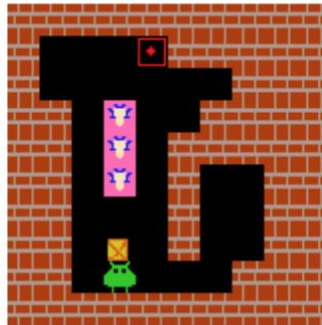

Instructions for the study

Please read the following instructions carefully



In the following study, you will be asked to help evaluate possible explanation strategies within the context of a game called Sokoban. It is a game in which you play as the character 'Sokoban'. The goal of Sokoban is to push the box to its target (given by the red cell in the image above). It can perform eight actions: move-up, move-left, move-right, move-down, push-up, push-left, push-right, push-down.

Also, each of the Sokoban's action is associated with some cost of doing it. Thus the aim here is to come up with a sequence of actions which will allow Sokoban to push the box with the least total cost.

In the study, you will be shown a plan that Sokoban can follow to achieve its goal, and then shown a question about a possible alternative plan. Your job then will be to select from two alternatives what you feel is a more reasonable explanation for that question.

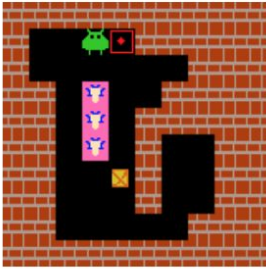
Before you are taken to the page with the plan and the question, you will be shown a set of concepts relevant to the game that will form the vocabulary for the explanations.

Please make sure to familiarize yourself with the concepts before moving on to the questions

Also, do not refresh the window or press the back button on any page in the study.

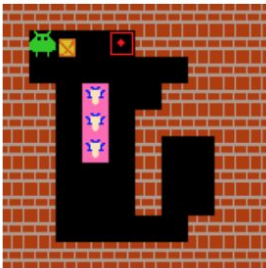
Show Concepts

Concepts:



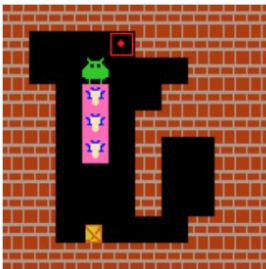
Target on right

The target cell is on the right of Sokoban



Wall on left of Sokoban

There is a wall on the left of Sokoban



No wall on right for at least 2 cells

At least two cells on the right of Sokoban do not contain wall



Box on pink cell

The box is present on the pink cell



Wall on left of box

There is a wall on the left of the box

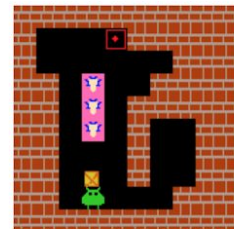
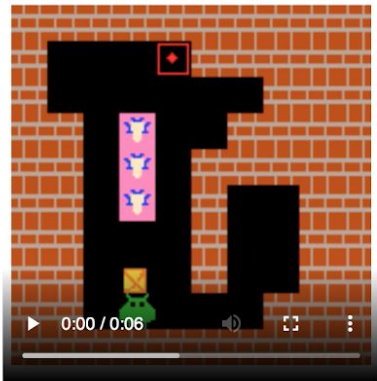
Show Plan

Proposed plan and the alternate plan

Click anywhere on the video below to view the proposed plan:

Plan goal: Push the box into the red target

Total cost: —



Alternate plan suggested by the user: Instead of pushing the box around the pink cells, directly push the box through them and then proceed to push it to the target.

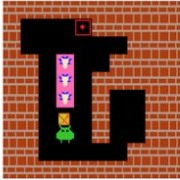
Explain why the alternate plan is more costly?

Explanation for why the alternate plan is more costly

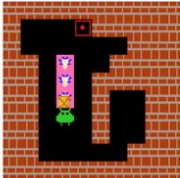
Alternate Plan Steps-

(Scroll down to see all the steps)

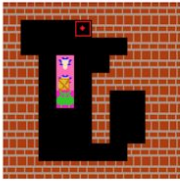
Step 1



Step 2



Step 3



Step 4

The alternate plan suggested by the user was: Instead of pushing the box around the pink cells, directly push the box through them and then proceed to push it to the target.

Please select the explanation that you find the most useful:

(You might have to scroll down if the explanations are not completely visible.)

- ☒ Step-1: 'push up' action costs 1.
Step-2: 'push up' action costs 1.
Step-3: 'push up' action costs 10.
Step-4: 'push up' action costs 10.
Step-5: 'push up' action costs 10.
Step-6: 'push up' action costs 1.
Step-7: 'move left' action costs 1.
Step-8: 'move up' action costs 1.
Step-9: 'push right' action costs 1.
Total-cost of the alternate plan is 36. Proposed plan only costs 11.
- ☐ Executing action 'push up' action costs at least 1
This is happening in the steps 1, 2 and 6

Executing action "push up" when "Box on pink cell" is true costs at least 10.
This is happening in the steps 3, 4 and 5

'move left' action costs at least 1. This happens in step 7

'move up' action costs at least 1. This happens in step 8

'push right' action costs at least 1. This happens in step 9

Thus, total-cost of the alternate plan is at least 36. Proposed plan only costs 11.

Submit

Explanation feedback

How complete was the explanation you selected?

- ☒ Not at all complete
- ☐ Slightly complete
- ☐ Moderately complete
- ☐ Very complete
- ☐ Fully complete

What other information would be useful (if any):

Submit

Background information

Please enter Age:

Select gender

Do not specify

▼

Select education

I have a under-graduate degree

▼

Have you attended any
AI classes?

☐ Yes ☐ No

If you have attended any
AI classes, are you aware
of any Automated
Planning techniques?

☐ Yes ☐ No

If you are aware of any
automated planning
techniques, then specify
planning formalisms you
are familiar with:

Submit information and finish study

Thank you for taking the study. You may close the window now.