

# DEBUG IT!

HELP! CAN YOU DEBUG THESE FIVE SCRATCH PROGRAMS?

In this activity, you will investigate what is going awry and find a solution for each of the five Debug It! challenges.

## START HERE

- Go to the Unit 4 Debug It! Studio:  
<http://scratch.mit.edu/studios/475634/>
- Test and debug each of the five debugging challenges in the studio.
- Write down your solution or remix the buggy program with your solution.

FEELING  
STUCK?

THAT'S OKAY! TRY THESE THINGS...

- Make a list of possible bugs in the program.
- Keep track of your work! This can be a useful reminder of what you have already tried and point you toward what to try next.
- Share and compare your problem finding and problem solving approaches with a neighbor until you find something that works for you!

### **DEBUG IT! 4.1** <http://scratch.mit.edu/projects/24271192>

In this project, the "Inventory" list should be updated every time Scratch Cat picks up a new item. But Scratch Cat can only pick up the laptop. How do we fix the program?

### **DEBUG IT! 4.2** <http://scratch.mit.edu/projects/24271303>

In this project, Scratch Cat gets 10 points for collecting Yellow Gobos and loses 10 points for colliding with Pink Gobos. But something isn't working. How do we fix the program?

### **DEBUG IT! 4.3** <http://scratch.mit.edu/projects/24271446>

In this project, Scratch Cat is thinking of a number between 1 and 10. But something is wrong with the guess checking – it doesn't work consistently. How do we fix the program?

### **DEBUG IT! 4.4** <http://scratch.mit.edu/projects/24271475>

In this project, the "# of hits" display should increase by 1 every time the Scratch Cat is hit by a tennis ball. But the "# of hits" increases by more than 1 when Scratch Cat is hit. How do we fix the program?

### **DEBUG IT! 4.5** <http://scratch.mit.edu/projects/24271560>

In this project, Scratch Cat is navigating a maze to get to the yellow rectangle. But Scratch Cat can walk through walls. How do we fix the program?

## FINISHED?

- + Add code commentary by right clicking on blocks in your scripts. This can help others understand different parts of your program!
- + Discuss your testing and debugging practices with a partner. Make note of the similarities and differences in your strategies.
- + Help a neighbor!