

Name:

Mission 16 Assignment – Breakout

Now that you've conquered *Handball* you are all set to code one of the all-time arcade classics! Imagine that you've been tasked by Atari's CEO to create the next hit game for the company. *Ready to break some bricks?*



Mission 16: Break Out

Follow in the footsteps of legends to create an iconic arcade game.

1. Read the introduction. Click **NEXT**

2. Complete Objective #1. Read the instructions and then follow CodeTrek for the code.

What is a prototype?

3. Complete Objective #2.

What is a matrix?

How do you create a matrix in Python?

4. Complete the quiz.

5. Complete Objective #3.

6. Complete Objective #4.

Why do you need the `int()` conversions for `i` and `j`?

7. Complete the quiz.

8. Complete Objective #5.

Describe how the code bounces the ball in this objective:

9. Complete Objective #6.

What is the secret word? Hint: It is in a comment and says "the secret word is.."

10. Complete Objective #7.

What is the pattern for adding a new feature to a program or game?

11. Complete Objective #8.

To turn in the assignment, download your code (FILE-DOWNLOAD), which will be a text file. Add your name in the filename. Then submit the file through Google Classroom or the class LMS.

SUCCESS CRITERIA:

- Add 8 rows of bricks to the handball program using a matrix.
- Detect if the ball collides with a brick.
- Delete a brick when the ball collides with it.
- Bounce the ball when it collides with a brick.
- Add a score and lives to the game.
- Add a mute button.
- Add a "level-up" feature
- Game works correctly and without errors