Explore 2 Handout: Introduction to Coding and Programming
Name(s): _____
Class/Group: _____
Date: _____

The process of creating instructions for computers to follow, enabling them to perform specific tasks is known as coding. In this activity, you will practice coding using Bee bots or rats. A few things to remember…

- Your bot can remember up to 200 commands. In this activity, you need to have at least 20 commands and your bot should return where it began. However, you can have more than 20 commands if you want.
- Every movement the bot will move 15 cm unless the command is a turn.
- You and your partner must first map out your commands in Part 1 BEFORE entering them into the bot. This could be a list of commands or a diagram (or both).
- Your bot should go in every possible direction at some point in the activity.
- When you map/list the commands, tally the distances as well to report the total distance traveled by your bot.

Part 1: The Plan
List and/or map the commands in the space below.

Total Distance Traveled (cm) = _____

Part 2: Test

1. *Mark the starting location of your bot with a circle sticker on the ground.*
2. *Hit "X" on your bot to reset any former commands.*
3. *Enter your commands then hit the green "play" button.*
4. *Answer the questions below when your bot has finished its journey.*

Did your bot begin and end at the same spot? _____
How many commands did your bot perform? _____
How was this process of creating and implementing a program using coding similar and different to artificial intelligent (AI) chat bot?

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