You have been chosen to help the fuzzFamily explore earth. Program your robot to complete the obstacle course using the code below.

Invent new commands and write them here

- Left
- Right

Leg Forward

Leg Backward

Body Rotate

Grab

Jump

Drop

Squat

Write your code here and give it to your robot to complete. Separate each command with a comma.
The two most important factors when teaching kids to code are: engaging them with something they love, and teaching them to think logically. Here’s a great game for doing just that!

Overview
Time frame - About 45-60 minutes
Your students have been selected by the fuzzFamily to explore Earth. Create a simple obstacle course and your kids must “program” a partner to complete it using the code key on the fuzzFamily Frenzy worksheet. Once they have written their code their partner must follow instructions to complete the course.

How this relates to programming?
Computers are quite dumb and won’t work without someone programming them with very specific instructions. Introduce your students to the basic principles of computer programming by having them work through a real life situation.

Materials
1. Pencil
2. fuzzFamily Frenzy worksheet
3. Space for arranging obstacles (gym, playground, yard or classroom)
4. Obstacles (These can be very ordinary items. Chairs, desks, tables, blankets, or playground equipment.)

Set up
Set up a short obstacle course. Something that could be completed in 10 minutes or less is best. This allows plenty of time for kids to experiment, test, and refine multiple solutions. Establish a “base” at one end of the room.

How to play:
Begin by talking about computer programming. Some things to cover:
   a. What is computer programming?
   b. How does computer programming work?
   c. Why do computers need to be programmed?
   d. Be sure to help them understand a computer will do exactly what it is programmed because it can’t think for itself.

Have everyone pick a partner and give each student a copy of the fuzzFamily Frenzy worksheet.

Practice the commands together so everyone understands what they mean.

Allow 5 minutes for students to examine the course, write their code, and come up with new commands. Have one partner write the code for getting through the obstacle course and one write the code for getting back to “base”.

When everyone is finished writing their code they can begin running the program. Allow 30 to 40 minutes for this section.

After all the teams have returned to “base”, begin going over their code. Be sure to ask questions about what they learned and what new commands they came up with. Discuss how this is similar to programming a computer.