**Wait Program! Worksheet Challenge 2 Solution**

**Answer the following questions related to program design:**

1. **Define the task you would like to perform:**

**We want the robot to:**

* **Remain at rest until the touch sensor is pressed.**
* **Once the touch sensor is pressed, move slowly forward until the touch sensor is pressed again.**
* **Once the touch sensor is pressed a second time, move twice as fast.**
* **Once the touch sensor is pressed a third time, move twice as fast as before.**
* **Once the touch sensor is pressed a fourth time, stop.**
1. **Write a set of instructions in English for creating the program:**
2. **Wait until the touch sensor is pressed**
3. **Move forward slowly**
4. **Wait until the touch sensor is pressed**
5. **Move forward twice as fast as before**
6. **Wait until the touch sensor is pressed**
7. **Move forward twice as fast as before**
8. **Wait until the touch sensor is pressed**
9. **Stop**
10. **Brainstorm about possible programming solutions below and write the one below that your group thinks is a good one.**
11. **Wait until the touch sensor in port 1 is pressed**
12. **Move forward for unlimited with power set to 25**
13. **Wait until the touch sensor in port 1 is pressed**
14. **Move forward for unlimited with power set to 50**
15. **Wait until the touch sensor in port 1 is pressed**
16. **Move forward for unlimited with power set to 100**
17. **Wait until the touch sensor in port 1 is pressed**
18. **Stop**
19. **Did you have to “iterate” (make changes to the program, etc.) to make it work?
How many iterations did you have to perform? Briefly explain each one.**

**Answers will vary. *Example answer*: No, the program worked correctly the first time through.**