**Algorithm - To make a cup of tea.**

A computer is not intelligent enough to do things by itself - it is only capable of doing what we tell it. The idea of an algorithm is to describe *exactly* how to do something so that any dumb person (or computer!) can do it without understanding how the person who wrote it was thinking.

Consider these steps for making a cup of tea:

1.Put teabag in cup

2.Fill kettle

3.Boil kettle

4.Pour water into cup

5.Add milk

6.Stir

7.Drink

Say we wanted to tell this to a robot so that it can make tea for us. Is it precise enough? Do you think that the robot will be able to understand it? It probably isn't precise enough. For example, we haven't said where we get the cup or teabag from, or that we have to put the milk back in the fridge afterwards to prevent it going off.

**My solution:**

1. Open cupboard
2. Get cup
3. Put cup on table
4. Approach kettle on its base on the table
5. Get kettle
6. Bring kettle to tap in sink
7. Turn on the tap
8. Fill kettle using water from the tap
9. Turn off tap
10. Bring kettle to its base
11. Turn on the kettle
12. Get a teabag from teabag box on table
13. Put teabag in cup
14. Wait for kettle to finish boiling
15. When finished, pour water in kettle into the cup
16. Approach fridge and open
17. Get milk from fridge
18. Pour milk into cup until tea is wanted colour
19. Put milk back in the fridge