

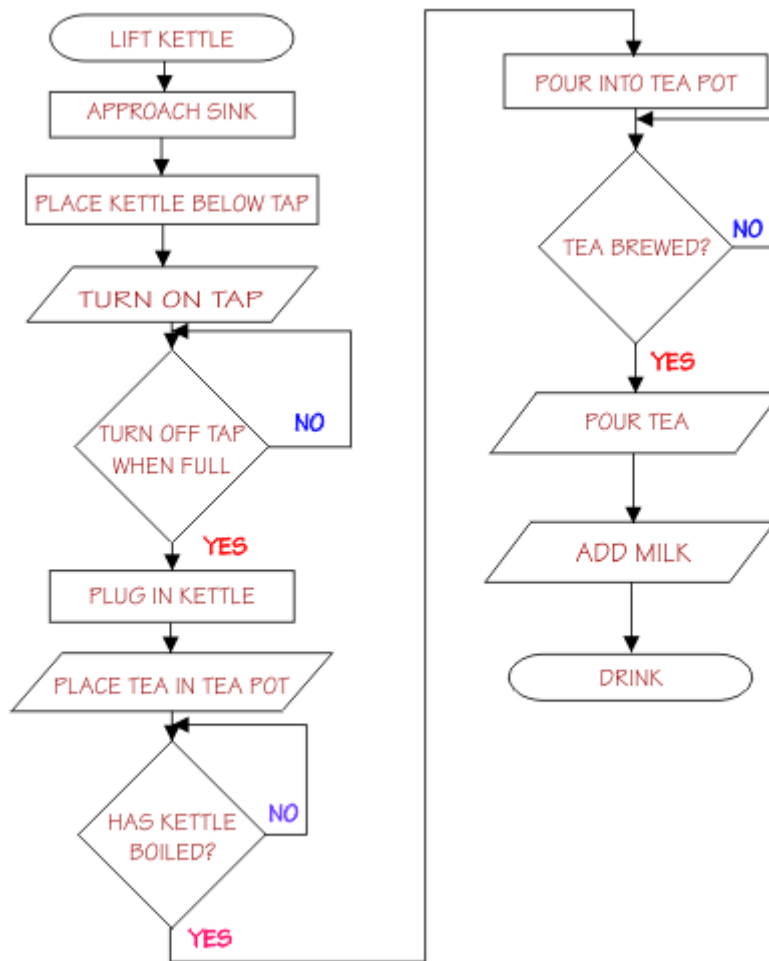
FLOW CHARTS

Flow Charts are used to help programmers in the early stages of programming. A flow chart is a chart that flows from one stage to the next and it will show what stage or event is first, second, third etc...

They are very useful when programming because they allow the programmer to set out, in a very simple way the sequence that he/she wants for each line of the program. (See the example below.)

THE FIRST STAGE OF PROGRAMMING

This is a flow chart representing the making of tea. It starts with filling the kettle with water all the way through every possible stage. Imagine a robot had to be programmed to perform this basic task. The programmer would have to give the robot every instruction. Remember - computers will only do what we instruct them to do. They cannot not decide anything for themselves.



If you examine the flow chart you will see that every stage of the tea making process is identified.

However, you may be able to add even more detail.

If you were to write a program for all the stages involved, at least one line would be needed for each stage.

The shape of each box is important. For instance, a diamond represents a decision, a rectangle is an ordinary process box, a parallelogram is an input or output and the start and end boxes also have their own shape.

A decision box has two possible outcomes - YES or NO. In the example shown a NO means that the flow 'loops' backwards.

Draw a flow chart to represent every stage of getting up in the morning and coming to school. Include the full range of boxes. The best way to start this question is to carefully list each stage.