COMPUTING & ICT—Year 09 Knowledge Organiser: Flowol and Pseudocode (Autumn 2)

Summary

In this unit, students will learn about **Flowol** and **Pseudocode.**

Flowol is computer control and robotics software which allows students of all ages to explore the world of automatic systems through: the virtual world of Mimics (controllable on-screen pictures), the real world of models operated by connected **interface hardware**.

Examples include: Operate systems, e.g. traffic lights, control actions, e.g. a robot's movement, creation of video games, and the control of manufacturing devices.

Pseudocode is **an artificial and informal language that helps programmers develop algorithms**. Pseudocode is a "text-based" detail (algorithmic) design tool. The rules of Pseudocode are reasonably simple. All statements showing "dependency" are to be indented. These include while, do, for, if, switch.

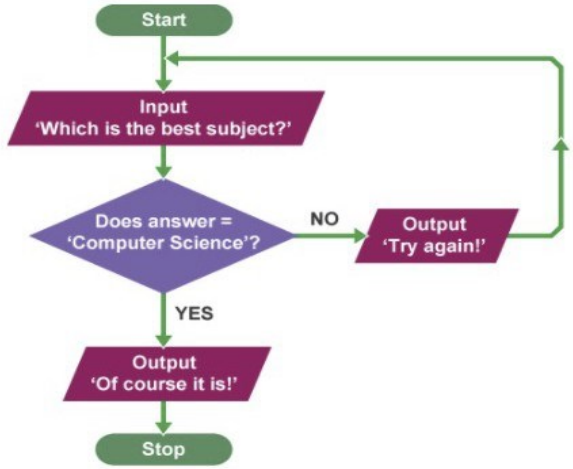
Key Vocabulary

Algorithm	Algorithms are an exact list of instructions that conduct specified actions step by step in either hardware or software based routines.
Flowchart	A flowchart is a formalised graphical representation of a logic sequence, work or manufacturing process, organisation chart, or similar formalised structure.
Program	In computing, a program is a specific set of ordered operations for a computer to perform.
Sequence	In programming, statements are executed one after another. A sequence is the order in which the computer statements are run.

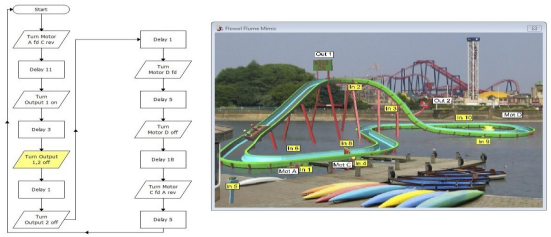
Using Flowcharts

Visual programming, or programming with a flowchart, can be used to focus on the logic of the solution without getting distracted by the complexity of the written programme language.

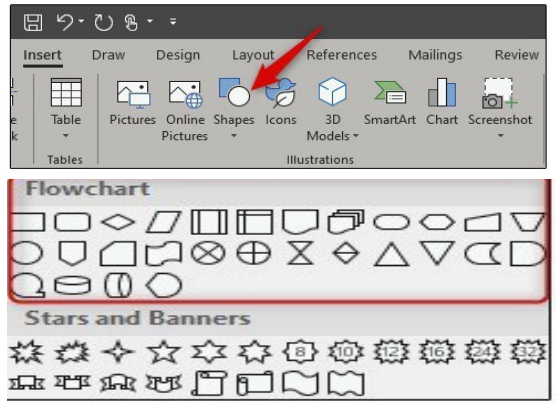
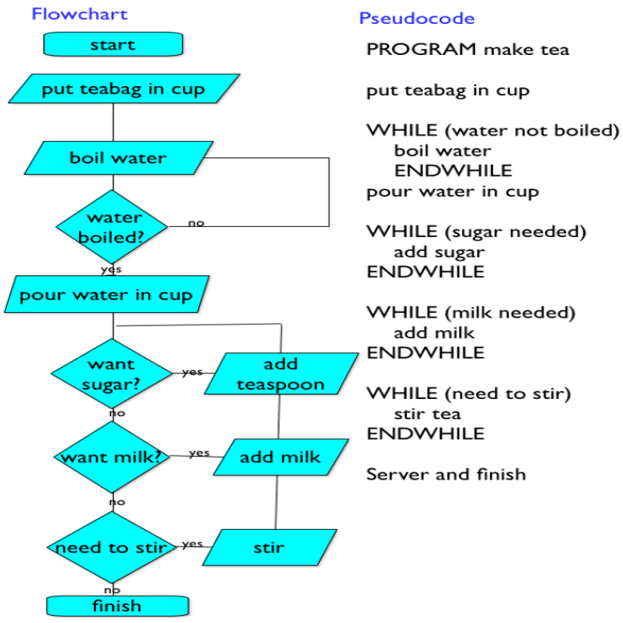
Flowcharts can be used to plan out programs. Planning a program that asks people what the best subject they take is, would look like this as a flowchart:



Flowol in Action



Making a Flowchart in Word



Flowchart and Pseudocode