

Computer Controlled Greenhouse

Insert text here



Controlling an Automatic Greenhouse

To get the best plant growing conditions, a greenhouse needs to have the ideal temperature and humidity (moisture in the air).

A computer controlled greenhouse might have input sensors for the sunlight, temperature and moisture.

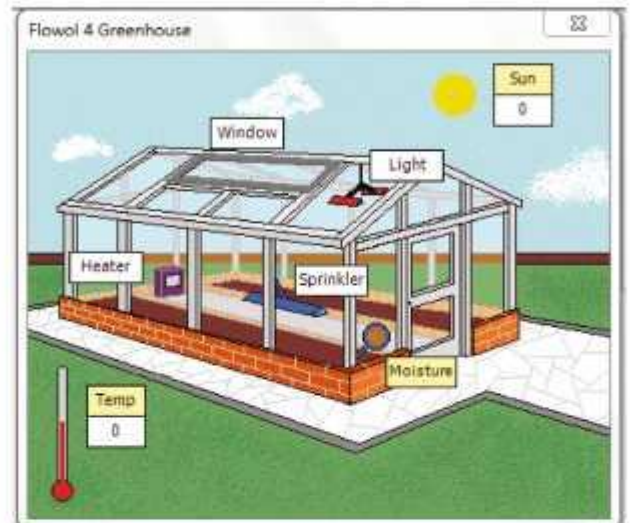
The greenhouse could have an electronic heater, sprinkler, light and window motor.

Can you design a flowchart which would run the computer program to operate all the outputs, based on an input level.

For example, if the humidity falls below the values set in the program, the computer activates the sprinklers and closes the windows. If the temperature falls below the values set in the program, the heater is automatically turned on.

Try researching the correct values for plant growing conditions (for example on the Internet).

Design and draw one or more flowcharts with the correct values to control the four outputs shown in the picture: heater, sprinkler, light and window motor. The changing inputs to be monitored are the level of sunlight (0-100), the temperature (0-100) and moisture sensor (off when soil is dry, on when soil is wet).



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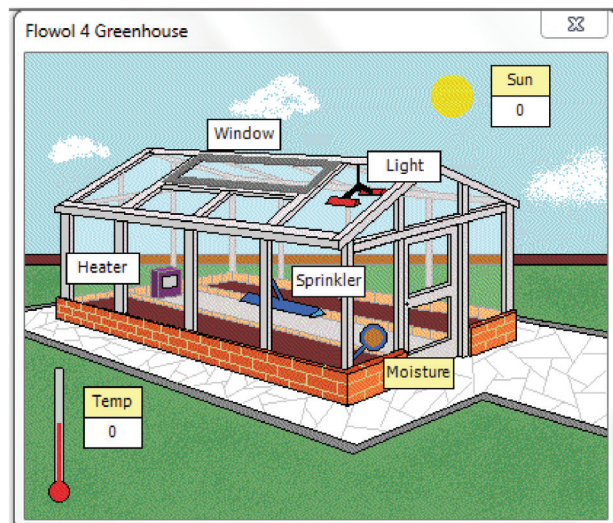
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Design Your Own Flowchart

Insert text here



Think of your own sequence of instructions for a task. For example, it could be something done in the kitchen, part of playing a game or how to use an electronic device. Make notes in the box on the instructions and the order.

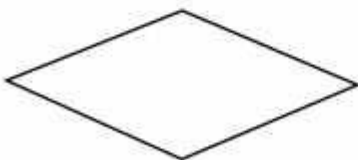
Now use the conventional symbols below to create your own flowchart that illustrates the process.



Use this type of symbol for the Start / Stop of your flowchart.



Use this type of box for a 'process' (something to be done).



Use this type of box for 'decisions' (where there are two possible outcomes such as 'Y' or 'N').

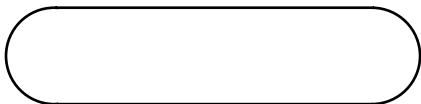


Connect your flowchart symbols using arrows to show the direction, or 'flow' of the process.

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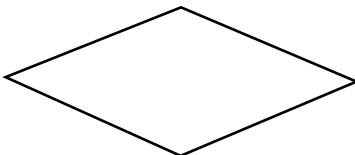
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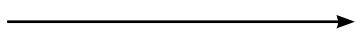
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