Amazing Facts

People have long been fascinated by mazes — and maze games on the home computer are no exception

Mazes have always been a source of fascination and enjoyment to both young and old alike, whether they are big enough to get lost in, or small enough to hold in the palm of the hand. The maze has, in fact, become the basis of a huge variety of computer games, ranging from a very simple two-dimensional aerial view of a maze, right up to extremely complex mazes in three dimensions. The latter sort actually simulate a view of the maze from within, so that the player is encouraged to imagine that he is inside a real maze. To help him get his bearings, or confuse him even further, some of these three-dimensional mazes also combine brief glimpses of an aerial view of the maze.

Siren City
This Commodore 64 game is a development on the traditional 'aerial view' game. A police car patrols a city, complete with roads and buildings

Ring of Darkness
Though this game for the Dragon is really an Adventure – style game, it contains a three-dimensional maze as one of its major elements. Pits and ladders allow you to move up and down

Way Out
A realistic three-dimensional image can be achieved on a Spectrum with Way Out. Move the joystick fractionally, and your view will change also

Ring of Darkness

As mazes have become more sophisticated in their visual and sound effects, so have the imaginations of their programmers been allowed to wander. A player wishing to take a leisurely stroll around a maze should avoid those that conceal man-eating monsters. An example of such games is 3D Glooper (available for the Commodore 64), in which the player searches the maze for special floor tiles, and can be attacked at any moment, by screen-filling monsters. The impending arrival of these creatures is announced, however, by the steady munching sounds from their approaching jaws.

Atic Atac (Spectrum) is a fully animated chase in which the player can assume any of three different characters. The maze is a multi-level series of pits, stairways and large dungeons through which you race against time. The dungeons are occupied by a variety of graphically depicted creatures and objects.

A program that comes close to simulating what

it actually feels like to be travelling through a maze is Way Out. The view is in true three-dimensional perspective, and as you move your joystick fractionally to the left or right the scene shifts proportionately in that direction.

Let us now consider some of the basic programming techniques used in constructing mazes.

Siren City

Way Out

IAN McKINNELL
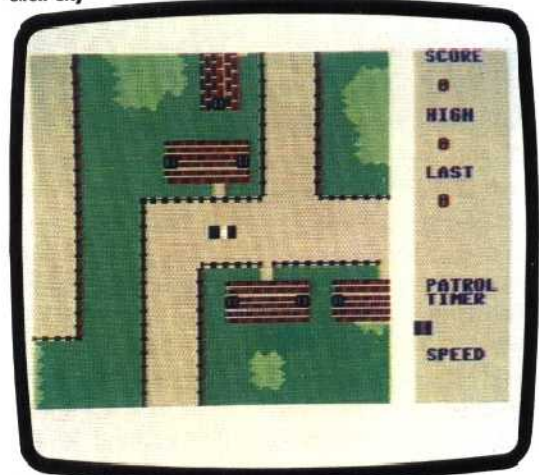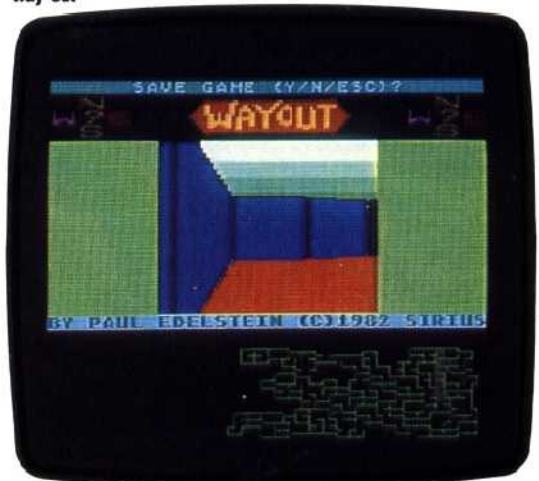
Making Mazes

The usual way of storing information about a maze is by using a two-dimensional array — M$(ROW,COLUMN), for example. Each cell of the array would define the characteristics of that cell of the maze. You could, for example, use a string of four characters to represent south, west, north and east. Zero could indicate the absence of a wall and one the presence of a wall. Thus, if M$(5,6) contained the string "1011" this would indicate that the cell in row five, column six was