or gets sued. If the programmer receives a single lump sum for his game, the software company will generally buy the copyright to the game too.

In addition to a royalty Harrap is also paid a retainer fee, but he is under exclusive contract to Gremlin Graphics for a year and cannot work for any other software house. Many contracts will also have an option clause written into them that will give the software company the exclusive right to first choice, or refusal, of any idea or program.

For a game to be successful, a company looks for sales of at least 15,000 during its lifetime, which typically is four or five months. In the case of Wanted: Monty Mole the company initially duplicated 10,000 copies for each machine (Spectrum and Commodore 64), with the option to duplicate more. When the game was launched Ian Stewart was predicting sales of 20,000 for each machine and said: 'I feel that it will definitely go to number one.'

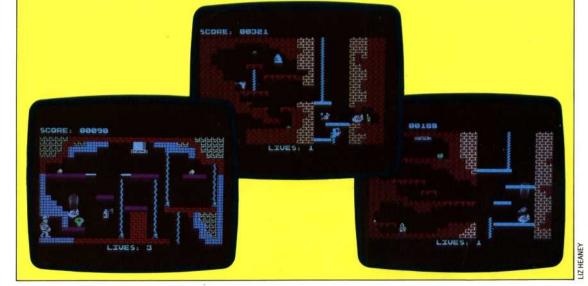
Christopher Kerry is another programmer for whom success came even earlier. At the age of 17 he left school before taking his A levels to work freelance for the House of Thor software company. Kerry wrote the game Jack and the Beanstalk on the Spectrum computer he had at his home in Sheffield. With no publicity and after being on sale for just two months, it had sold 'tens of thousands' according to the company (which was not prepared to reveal the exact figure). In fact the House of Thor was very protective towards Kerry, the reason given being that they were afraid of some other company 'poaching' him. As well as Christopher Kerry, the House of Thor uses 15 other programmers - most of whom are teenagers.

Like all software houses, the House of Thor welcomes people sending in programs for evaluation and if they look promising, then the company will contact the programmer that same day. A speedy response is vital as other companies might have been offered the same software. The House of Thor is only interested in arcade-type games and these can only really be written in machine code. The company is also looking for original themes and so will not consider programs that are near-copies of existing games: you cannot simply alter the graphics or change the names of monsters, for example. Apart from possible legal action, such games are unlikely to sell well.

Salamander is a larger software house with nearly 40 programmers on its books. Chris Holland, the Managing Director, gave some further hints to potential games writers: 'Where you can make a killing is by writing software for new machines when they've just come out. We welcome software for the Amstrad, the Atmos and the MSX micros. With something like the Spectrum it's more difficult unless it's a completely new idea.' The company has a range of about 50 titles for most of the popular home computers — not just the Commodore 64 and Spectrum.

Rather than trying to sell programs to software houses, a few programmers start their own. Llamasoft and Bug-Byte are just some of the software companies that have been founded by young games programmers. Unfortunately you do need quite a lot of capital to get started. Ian Stewart's company, Gremlin Graphics, started with a single game, Potty Pigeon, but are hoping for a range of five programs by the end of 1984. All four of the directors have had to put their own money into the company, to pay for publicity and distribution: a colour page advert in a computer magazine costs over £1,000 if production costs are included. Even a range of successful games does not guarantee financial security. Imagine (see page 79) went bankrupt in July 1984 owing over  $\pounds 1$  million — yet at one point the company was selling £300,000 worth of games software every month.

Setting up your own software company can be risky: as well as good games you also need sound financial advice. But anyone can send in a program to an existing software house 'on spec'. Who knows, you might have written the next number one.



## The Pits

The programmer who wrote Wanted: Monty Mole is the archetypal software whizz-kid young, self-taught, bright and well-paid. The game itself is far from typical: it takes a flippantly anti-union look at the 1984 miners' strike, but every copy sold will gain the Miners' Welfare Fund a five pence donation from the publishers