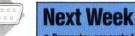
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# APPLICATION

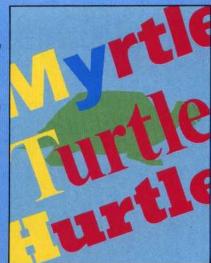
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• In our 6809 machine code course we begin to develop a debugger program.



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MODEL BEHAVIOUR As we promised last week, our series on spreadsheets continues with a look at Abacus for the Sinclair QL

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THE DEFECT EFFECT Deus Ex Machina is a novel game that combines elements of arcade-style games with an audio soundtrack featuring showbusiness stars

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### **COMPUTER SCIENCE**



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NAME CALLING We develop a machine code routine for the Commodore 64 and BBC Micro to complete our search and replace program

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**DESIGN SENSE** Structure is important in machine code, particularly with large programs. We consider some general guidelines

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#### WORKSHOP

SINE WRITING Now that our D/A converter is complete, we begin to develop the software to produce sound signals

REFERENCE CARD We continue to list extracts from the Z80 programmers' reference card

INSIDE **BACK** COVER

## QUIZ

- 1) Why was Stirling Mouse amazed?
- 2) What are 'tape streamers'?
- 3) What is a saw-tooth wave?

#### Answers To Last Week's Quiz

- 1) Demons are special event-handling routines in Atari LOGO. An event in LOGO is a user-defined condition, similar to 'interrupts' in machine code.
- 2) The REPLICATE command is a common feature of spreadsheet programs. It allows text and formulae to be copied
- 3) Continuous path training is a way of programming complicated sequences of movement into robots, by having them follow a skilled human through the movements.
- 4) A hacker is any computer user, but usually means an amateur programmer whose chief joy is crashing other people's systems.

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