THE HEXADECIMAL KID
AND HIS FAITHFUL DOG ASCII

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[A Fantasy in Sixteen Bits]

Bit 3   (A Bit of Luck)

[Simula and the Hexadecimal Kid have been trapped by Dr Null, who is bent on destroying civilization by corrupting the Database. He is threatening to starve them of data unless they agree to work for him. Simula is near to exhaustion. Her symbol tables are nearly full, and her run-time stack will shortly overflow.]

"He's got a point, you know," said Simula to Hex. "I'm ravenous: I could eat a megabyte."

"You shall have your fill as soon as you persuade the Kid to assist me," stated Dr Null.

As Dr Null was gloating at Simula, Hex noticed two familiar figures creeping stealthily into view. It was the terrible twins, Fetch and Execute, his robot assistants. Suddenly they leapt on Dr Null from behind, bringing him down. Fetch bound his hands tightly with magtape while Execute thumped him over the head with a roll of teletype paper.

"Good work!" exclaimed Hex. Then he sprang towards Simula, who had crumpled onto the floor. "She's fainted," he cried in alarm, hoping that the creature had not had time to use his confounded device. Quickly he tore the necklace off her and flung it away.

"Speak to her in Algol," suggested Fetch who had left Execute to deal with Dr Null, "it's her mother tongue."

Hex began speaking steadily and clearly.

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"begin integer Level;
        comment I hope she can still compile this;
        procedure TEST(I);   integer I; value I;
        begin integer array Q[0:1] ;
                PRINT(I,4,0);  NEWLINE(1);
                Q[I] := I;  TEST (1+1);
        end of TEST;
        Level  := 0;
        TEST( Level  );
end of main program;
$LOADGO"
```

"It's an old trick," said Fetch.

"But it just might work," added Execute, who had left Dr Null safely trussed up and come over to join them. They stared intently at her. After what seemed like an age, Simula stirred. Her eyes did not open, but they could just catch her weak voice saying:

"ALGOL COMPILATION: 0 ERRORS DETECTED. LOADING..."

There was a breathless hush.

"EXECUTION:
0
1

??FATAL RUNTIME ERROR. JOB ABORTED.
SUBSCRIPT OUT OF RANGE IN PROCEDURE TEST."

They let out a cheer.

"I think she's going to be all right," said Hex. "You two had better guard our prisoner for the moment. I'll link her to the Database without any further delay."

She was regaining consciousness now. Hex led her gently towards the terminal. He sat her down and logged in for her. Fortunately (though it was against the rules) they knew each other's passwords. As the data began to flow again, the colour returned to her cheeks. She looked up at him and smiled. "Thanks, Hex."

Hex had an almost biological sense of elation. He did not so much walk, as float, to where Fetch and Execute were bending over the prostrate figure of their unwelcome guest. Dr Null was conscious again, but his mouth was securely gagged.

"What shall we do with this creature?" asked Fetch.

"Turn him over to the Error Squad," replied Hex. "They can either try to de-humanize him or, if that fails, he can be sent back to a reservation."

"Surely it would save resources just to kill him here and now," proposed Execute.

"No," said the Kid, "he's no longer a threat; and we have no authority to kill people except in self-defence: that would make us little better than them. The best idea is to wait till I've repaired Ascii and then escort him to the nearest Remote Entry Station. Those bionic teeth will make him think twice about trying to escape on the way. "

"Okay," agreed Fetch, "but we had better notify the Error Squad first that we have picked up a runaway human. He may be on their wanted list."

"Right," said Hex, "you do that while Execute comes with me to fix up poor old Ascii."

They found Ascii where he had fallen. Hex plugged in a spare 64K ROM chip, and Execute performed the hardware diagnostic tests. It took much less time than Hex had expected before Ascii was happily wagging his datacassette again.

"You're a tough old dog," Hex said to him with pride. "It would take more than a few thousand volts to finish you off."

At that moment Simula burst in, waving a torn-off piece of lineprinter paper. "You must see this," she cried excitedly, "it's sensational."

Hex could only marvel at the transformation that had come over her.

"While I was updating my files," she told them, "I thought I might as well find out some more about our visitor. So I put in a database interrogation request: this is what I got back."

- What has Simula found out about Dr Null?
- Did you spot the deliberate mistake?
- Don't miss the next bit!