

## **Syntax and logic errors - GCSE Computer Science video for syntax and logic errors**

(JOLLY MUSIC)

DENISE: Coffee, please!

CHEF: The machine's over there.

MACHINE: I am the Taste-o-matic.

CHEF: The future of food and beverage preparation apparently.

DENISE: Eh?

MACHINE: Please type in your order.

DENISE: I need coffee, but in order to get coffee, I need to program this machine but in order to program this machine, I need coffee, but in order ...

VICKY: Alright. I'll do it. What size do you want?

DENISE: Large.

VICKY: Cup size equals 'large'. How many shots?

DENISE: One.

VICKY: It's Monday.

DENISE: Two.

VICKY: Add two shots coffee. Milk?

DENISE: Half a cup, more or less.

VICKY: Add milk until more or less half full. Sugar?

DENISE: It's bad for you.

VICKY: Anything else?

DENISE: Fill the rest up with cream.

VICKY: Add cream until full. Go.

MACHINE: Syntax error.

VICKY: Oh.

DENISE: Aargh.

# **BBC** Bitesize

CHEF: The program won't even start.

DENISE: Why?

CHEF: It isn't following the rules of the programming language. You must have made a typo: wrong spelling or wrong symbol.

MACHINE: Check order.

DENISE: You spelt coffee wrong.

VICKY: Oh yeah.

DENISE: You did it on purpose.

VICKY: C-O-F-F-E-E.

DENISE: Must have coffee.

VICKY: Okay, go.

MACHINE: Processing order.

VICKY: Yes.

DENISE: It's working.

VICKY: Two shots coffee. Milk half full. Er ...

(BEEPING ERROR)

DENISE: Aargh.

CHEF: Shut it down. Oh no.

MACHINE: Logic error.

VICKY: But the program worked fine.

CHEF: A program with a logic error will still work ...

VICKY: Right.

CHEF: ... but it won't do what you expected it to.

DENISE: Check it again.

CHEF: It can have any number of causes.

VICKY: Cup size large. Fine. Two shots coffee. Great. Add milk until more or less half full.

CHEF: More or less half full?

# **BBC** Bitesize

DENISE: But that's all I wanted, more or less.

CHEF: I know what you meant, but a computer takes it literally.

VICKY: Oh yeah. How about add milk until equal to half full?

DENISE: Try that.

VICKY: Anything else?

DENISE: Now.

VICKY: Go.

MACHINE: Processing order.

VICKY: Two shots coffee.

DENISE: It's working.

VICKY: Milk. Half full?

CHEF: Yes.

VICKY: Add cream until full.

DENISE: It's ALIVE.

MACHINE: Enjoy your coffee.

VICKY: So a syntax error is when the rules of the programming language are not followed.

CHEF: Yeah, like a typo or when you use the wrong symbol.

VICKY: And with a logic error, the program runs but doesn't do what you expect it to?

CHEF: Yeah.

VICKY: Such as giving you an unexpected output or getting stuck in the infinite loop.

CHEF: And it can be caused by all sorts of reasons, including incorrectly using brackets in calculations or ...

DENISE: Shut up and give me my coffee.

(GROWLS)