011 An algorithm a day...

Algorithm Question

You are writing a program that uses an array called WordList. This array contains 10 foreign words in alphabetical order. The contents of the array are shown on the left.

You need to write an algorithm that:

- allows the user to input a word, -
- goes through the items in the array WordList in turn, starting from the WordList(1),
- if it finds the word that the user has input, it outputs "Word found". -

[5 marks]

taso

walo

WordList (1)	akesi
WordList(2)	esun
WordList(3)	jaki
WordList(4)	kala
WordList(5)	lipu
WordList(6)	mama
WordList(7)	nasa
WordList(8)	olin

WordList(9)

WordList(10)

Source: OCR GCSE Computing Additional Specimen Exam

Algorithm Example Answer

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[5 marks]

There are always different ways to solve a problem. This algorithm is just an example. What is important is that the logic is correct!

LOGIC:

- Input a word
- Code contains a loop starting from item 1
- ... compares the word searched to the current item
- ... outputs "Word Found" if there is a match
- loop stops when you get to item 10 -

EXAMPLE ALGORITHM:

searchWord = input("Enter your word")

for count = 1 to WordList.length
if WordList[count] == searchWord then
 print("Word Found")
endif

next count

WordList (1)	akesi
WordList(2)	esun
WordList(3)	jaki
WordList(4)	kala
WordList(5)	lipu
WordList(6)	mama
WordList(7)	nasa
WordList(8)	olin
WordList(9)	taso
WordList(10)	walo