010 An algorithm a day...

Algorithm Question

A display board can show a flashing message of up to 20 characters.

Write an algorithm which:

-   Allows the user to input the message and the number of flashes
-   Rejects the message if it is longer than 20 characters and stops
-   Otherwise it repeatedly displays the message and clears the display for the correct number of times.

[5 marks]

Algorithm Example Answer

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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:

- **Inputs message and number of flashes**
- **If length of message > 20, output error message and stop**
- **Otherwise run a loop which will**
- **... flash the message**
- **... for the correct number of times**

EXAMPLE ALGORITHM:

```
message = input("Enter your message: ")
numberOfFlashes = int(input("Input number of flashes"))
if message.length > 20 then
    print("This message is too long")
else
    for i = 1 to numberOfFlashes
        print(message)
        sleep(1)
        print("")
        sleep(1)
    next i
endif
```