002 An algorithm a day…

Algorithm Question

If Monday = 0, Tuesday = 1 etc…

…write an algorithm in pseudocode which:
- Asks the user to enter a number,
- Outputs the day that the number represents,
- Validates the number so that an error message displays if the number is not a valid weekday number.

[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:

- **Number INPUTTED and STORED**
- **Multiple IF / CASE statements to decide which day based on inputted number AND an OUTPUT statement to display the day to the user**
- **An ELSE / CASE to handle numbers below 0 and above 6 with an error message to inform the user of the invalid entry.**

EXAMPLE ALGORITHM:

```
INPUT number

IF number == 0 THEN

        DISPLAY "Monday"

ELSE-IF number == 1 THEN

        DISPLAY "Tuesday"

ELSE-IF number == 2 THEN

        DISPLAY "Wednesday"

ELSE-IF number == 3 THEN

        DISPLAY "Thursday"

ELSE-IF number == 4 THEN

        DISPLAY "Friday"

ELSE-IF number == 5 THEN

        DISPLAY "Saturday"

ELSE-IF number == 6 THEN

        DISPLAY "Sunday"

ELSE

        DISPLAY "INVALID NUMBER ENTERED"
```