# 002 An algorithm a day…

**Algorithm Question**

If Monday = 0, Tuesday = 1 etc…                          *Adapted from OCR GCSE 9-1 Unit 2 Sample Exam*

…write an algorithm 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

If Monday = 0, Tuesday = 1 etc…

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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:**

- **Value INPUTTED and STORED**
- **Inputted value cast to an integer type**
- **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:**

```
number = input("Enter a number: ")
number = int(number)
if number == 0 then
        print("Monday")
elseif number == 1 then
        print("Tuesday")
elseif number == 2 then
        print("Wednesday")
elseif number == 3 then
        print("Thursday")
elseif number == 4 then
        print("Friday")
elseif number == 5 then
        print("Saturday")
elseif number == 6 then
        print("Sunday")
else
        print("INVALID NUMBER ENTERED")
endif
```