

Algorithm Description – Calendar

In plain English, point-form, think through the steps necessary to solve the given problem.

Make use of key words like *compare*, *iterate*, *store*.

In code, of course, these translate to conditional statements, loops, and using variables.

Algorithm

INPUT

- Iterate until an integer between 1 and 7 inclusive is provided
 - When provided, store in a variable to track starting day of the month
- Iterate until an integer between 28 and 31 inclusive is provided
 - When provided, store in a variable to track number of days in the month
- Iterate until an integer between 1 and (*days in month*) inclusive is provided
 - When provided, store in a variable to track the special day

PROCESS

- Print the header line with days of the week
- Iterate 37 times
 - When month hasn't started yet (not at start day)
 - Print three spaces
 - Otherwise...
 - Increment a variable to track current day in the month
 - When current day a single digit day
 - If special day
 - Print a space, an asterisk, and the day of month
 - Otherwise
 - Print two spaces and the day of the month
 - When current day a two-digit day
 - If special day
 - Print an asterisk, and the day of month
 - Otherwise
 - Print one space and the day of the month
 - If the month is finished, stop the loop
 - Print a space to separate columns of month
 - If 7 days have been printed, print a new line character

OUTPUT

- Printed as we went through the process section