

Baby temperature monitoring

A new born baby is kept in a cot in a hospital; the temperature of the baby is monitored every 10 minutes. The temperature of the baby is recorded in degrees Celsius to one decimal place and must be within the range 36.0°C to 37.5°C.

TASK ONE

To simulate the monitoring required, write a routine that allows entry of the baby's temperature in degrees Celsius. The routine should check whether the temperature is within the acceptable range, too high or too low and output a suitable message in each case.

TASK TWO

Write another routine that stores the temperatures taken over a three hour period in an array. This routine should output the highest and lowest temperatures and calculate the difference between these temperatures.

TASK THREE

For a baby who has a temperature difference of more than one degree Celsius, and/or has been outside the acceptable range more than twice in the three hour period, output a suitable message giving a summary of the problem.

REMINDERS

Your program must include appropriate prompts for the entry of data. Error messages and other outputs need to be set out clearly and understandably. All variables, constants and other identifiers must have meaningful names. Each task must be fully tested.

ATTRIBUTION/CREDIT

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