Algorithm Question

A computer game shows 6 players around a table on seats. They are numbered 1 to 6.

The names of the players are stored in an array with 6 elements called PlayerName. The index position of the array is used to indicate the seat number. For example, the value of PlayerName(1) is ‘Helen’.

During the game, each player sometimes moves clockwise by a given number of places.

For example, if the number of places is 2, Helen will move to seat 3, Priya will move to seat 1 etc.

Write an algorithm in pseudocode, which updates the contents of the array ‘PlayerMove’ after a move has occurred. The algorithm should:
- Allow the number of places to move to be input
- Use iteration
- Ensure that all of the players’ names are moved to the correct position in the array.

[6 marks]
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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:

- Input the number of places to move (e.g. Num)
- Use of temporary variable(s) or second array to
  - Avoid overwriting values in the array
- Sensible use of a loop
- ... with correct end condition
- Correctly deals with moving from position 1 (e.g. 1 + Num)
- Correctly deals with moving from position 6 (e.g. Num )

EXAMPLE ALGORITHM:

```
INPUT Num

FOR loop = 1 to Num
    Temp = PlayerName(6)
    PlayerName(6) = PlayerName(5)
    PlayerName(5) = PlayerName(4)
    PlayerName(4) = PlayerName(3)
    PlayerName(3) = PlayerName(2)
    PlayerName(2) = PlayerName(1)
    PlayerName(1) = Temp

Next i
```