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Assignment-12  
DA-2

CSE-B

Time-Complexity :-

From the Code, it can be seen that, All if and else if takes  $O(1)$  time.

In the last else: \*

- ① A while loop runs for:  $n-7$  time
- ② A for loop runs for 3 times to append "1000"

Best Case:  $O(1)$

Worst Case:  $T(n) = \cancel{O(n)} O(n-7) + O(3) + C$   
 $= \underline{O(n)}$  times.

Average Case:  $O(n)$