

Find the largest multiple of 2, 3 and 5

An array of size n is given. The array contains digits from 0 to 9. Generate the largest number using the digits in the array such that the number is divisible by 2, 3 and 5.

For example, if the array is {1, 8, 7, 6, 0}, output must be: 8760. And if the array is {7, 7, 7, 6}, output must be: "no number can be formed".

Source: [Amazon Interview | Set 7](#)

This problem is a variation of "[Find the largest multiple of 3](#)".

Since the number has to be divisible by 2 and 5, it has to have last digit as 0. So if the given array doesn't contain any zero, then no solution exists.

Once a 0 is available, extract 0 from the given array. Only thing left is, the number should be divisible by 3 and the largest of all. Which has been discussed [here](#).