

March 6th

Choose any three digit number.

Multiply it by 13. Then multiply your answer by 7.
Finally multiply by 11.

$$13 \times 11 \times 7 = 1001$$

So multiplying any 3 digit number by these three numbers will result in the digits repeated twice:

$$\text{ie } \text{"ABC"} \times 13 \times 7 \times 11 = \text{"ABCABC"}$$