**1.Consider a large number N = 1234567891011121314………979899100. What is the remainder when first 100 digits of N is divided by 9?**

The sum of these digits is:

1 + 2 + 3 + … + 99 = (99 × 100) / 2 = 4950

The remainder of this sum when divided by 9 is:

4950 mod 9 = (4 + 9 + 5 + 0) mod 9 = (18) mod 9 = (1 + 8) mod 9 = (9) mod 9 = **0**

Therefore, the answer is **0**.

**2.What is the value of x if the number 78212x535 is divisible by 11?**

**ANSWER 2: the sum of the digits of the given number is**

**7+8+2+1+2+x+5+3+5 = 33+x**

**As we know 33 is divisible by 11, so we do not require any more number to add in this given number .**

**Therefore, value of x will be ‘0’.**