Making Numbers

☞ To make numbers you have to follow some basic rules:

Step 1: For the largest (i.e., greatest) number, start placing digits from left most place and proceed towards right.

Step 2: Fill up the places with the digits in descending order.

Step 3: Do not repeat a digit.

NOTE: Do not place zero at the leftmost place.

For the smallest number, place the smallest non-zero digit at the Left most place and proceed towards right in ascending order.

⇨ **Let's take some examples:-**

1. Find the largest and smallest numbers using the digits 4, 0, 3 and 9.

⇨ **Solution:**

A. For the largest number, the largest digit should be placed at the left most place.

Therefore, the largest number that could be formed using the digits 4,0,3,9 is 9430.

B. For the smallest number, the smallest digit should be placed at the leftmost place.

Therefore, the smallest number that could be formed using the digits 4,0,3,9 is 3049.

2. Form the greatest and smallest 4-digit numbers using the digits 1, 4,8, where one of the Digits can be repeated twice only.

⇨ **Solution:**

A. For forming the greatest 4-digit number, let us repeat the greatest digit i.e., 8 twice.

Therefore, the largest number so formed is 8841.

B. For forming the smallest 4-digit number, let us repeat the smallest digit i.e., 1 twice.

Therefore, the smallest number so formed is 1148.