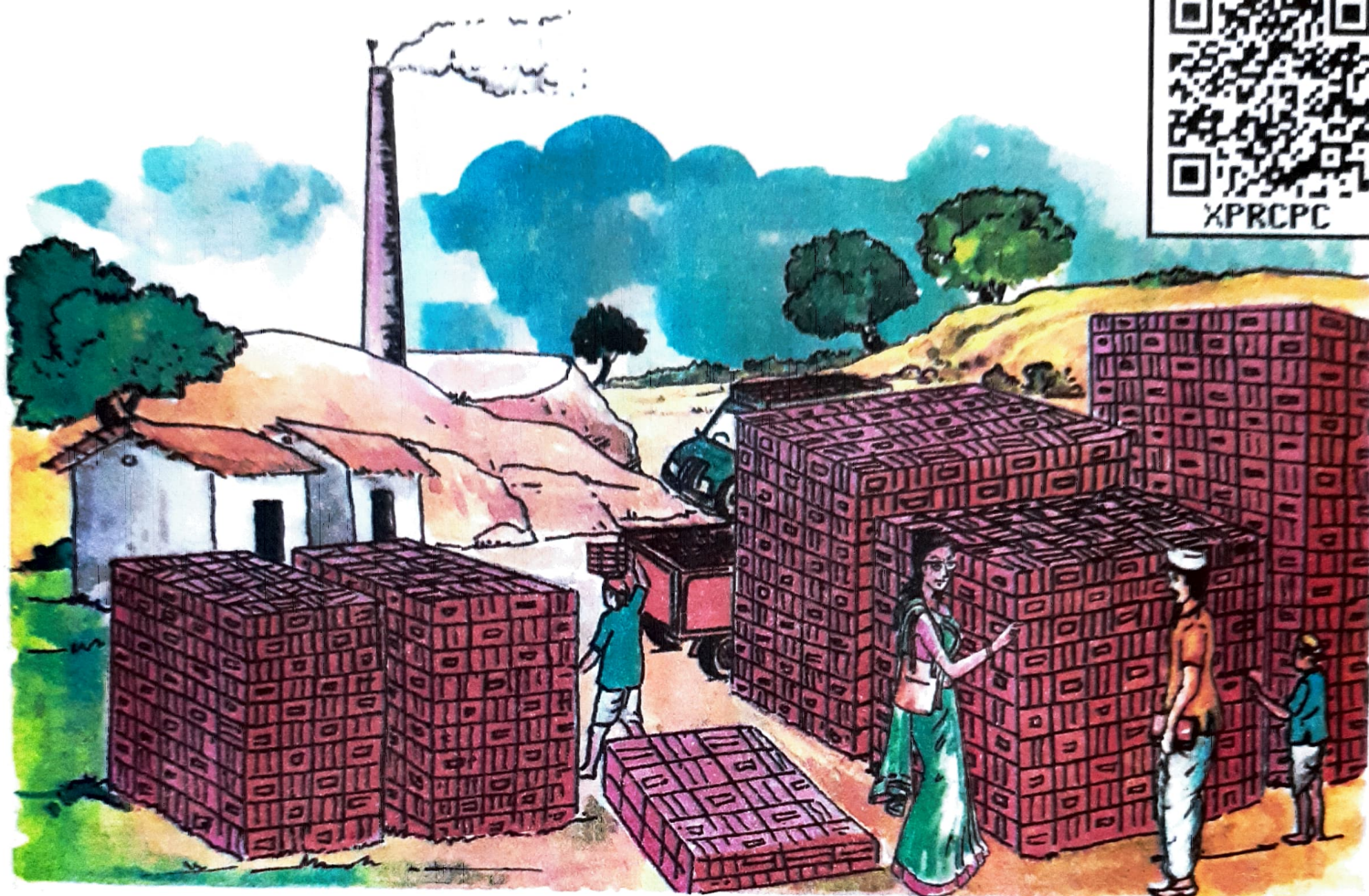




Bricks are needed to construct the boundary wall of a school. Rashmi went to brick kiln. There she asked the accountant about the bricks. The accountant told her that a tractor's trolley contains 2000 bricks and a truck contains 4000 bricks.

Let's see -

Which will contain more bricks, truck or trolley?

Number of bricks in a truck = 4000

Number of bricks in a trolley = 2000

Number of digits in both the numbers are equal. Therefore to find out the



greater number, compare the digit at thousands place of both the numbers -

digit at the place of thousands in 4000 = 4

digit at the place of thousands in 2000 = 2

$$4 > 2$$

Therefore, $4000 > 2000$ or $2000 < 4000$

A Truck will contain more bricks than a trolley.



Do it yourself -

Put the correct sign ($<$ or $>$) -

• 6536 5348

• 7894 8794

Look and understand -

I am 86530. I have five digits. I am greater than you.

Yes-yes! I have only four digits. I am 7921. I am smaller than you.



Do it yourself -

86530

$>$

7921

Put the correct sign ($<$ or $>$) -

• 92568 117804

• 325896 23149

Look and understand -

We both are the numbers of same digits..... the digits at ten thousands place are also the same how do we know who is greater.

I am greater than you because my digit at thousands place is greater than yours.

$$8 > 6$$



Do it yourself -

96402

$<$

98402

Put the correct sign ($<$ or $>$) -

• 345791 342578

• 568157 568734



The Smallest and the Greatest Numbers

Look- 25310, 40315, 16789

All the three numbers have five digits each. Therefore, compare the digits at ten thousands place of all the three numbers.

$$4 > 2 > 1$$

Out of these 1 is the smallest digit. Therefore, 16789 will be the smallest number among the given numbers.

Where as 4 is the greatest digit. Therefore, 40315 will be the greatest number among the given numbers.

Ascending and Descending order -

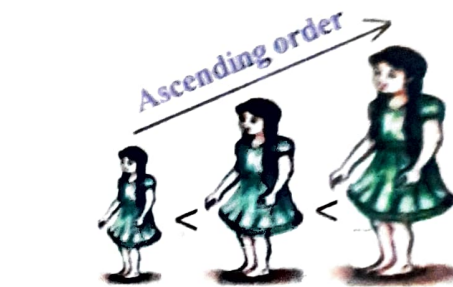
Let us compare the following numbers -

23599, 36938, 75682, 13578

digits at ten thousands place in the given numbers are -

$$2, \quad 3, \quad 7, \quad 1$$

$$1 < 2 < 3 < 7$$



Reverse order of ascending order is called descending order.

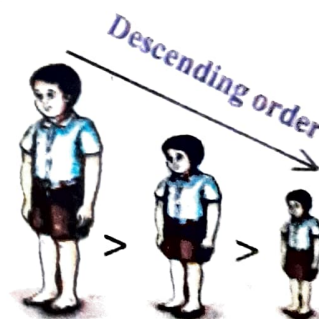
In this way we can say - $13578 < 23599 < 36938 < 75682$

Increasing order (ascending order) 13578, 23599, 36938, 75682

Now look at the numbers in this form -

$$75682 > 36938 > 23599 > 13578$$

Decreasing order (descending order) - 75682, 36938, 23599, 13578



Predecessor and Successor

Let us see- which number comes just before 72956?

We know, a number that comes just before any number is obtained by subtracting 1 from that number.

$$72956 - 1 = 72955$$

So, 72955 is the number that comes just before (predecessor) 72956.



Let's see -

Which number comes just after 72956?

We know, a number that comes just after any number (successor) is obtained by adding 1 to it.

$$72956 + 1 = 72957$$

Thus, 72957 is the number that comes just after (successor) 72956.



Do it yourself -

Predecessor number	Number	Successor number
.....	45678	
.....	13579	
.....	48057	
.....	34815	

Look at this too -

The greatest and the smallest number formed with 2, 7, 3, 5, 9, 8 -

To get the greatest number, we arrange the given digits in the descending order - 987532.

To get the smallest number, we arrange the given digits in the ascending order - 235789.

If zero is also included among the given digits, the smallest digit that comes just after zero is written at the left most place. Then zero is written after it. For example the smallest number of 5 digits formed with 8, 2, 1, 0, 5 will be 10258, not 01258.



Think -

Why 01258 will not be the smallest number of 5 digits?

Similarly, 85210 will be the greatest number of 8, 2, 1, 0, 5.



We have learnt

- To compare the numbers of five and six digits.
- To arrange numbers in ascending and descending order.
- To find out predecessor and successor of any number.
- To form the greatest and the smallest number with the given digits.
- To form new numbers with the help of given digits.

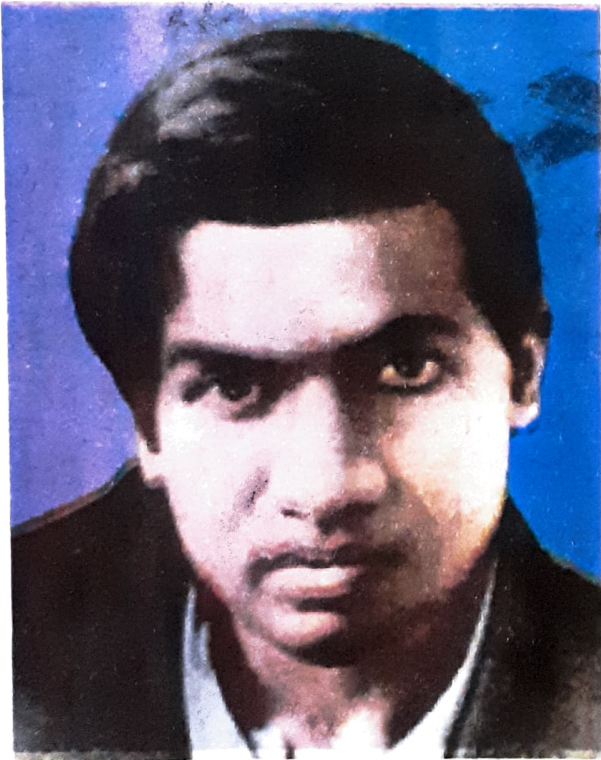
Exercise

- Put the correct signs ($>$, $<$) –
(a) 68845 68805 (b) 49095 49097
(c) 81468 80468 (d) 23536 20539
- Write the successor and predecessor of the following numbers -
(a) 9779 (b) 67895 (c) 91000 (d) 90100 (e) 32875 (f) 23596
- Some telephone numbers are given below, write them in ascending order-
332578, 272463, 272954, 256013
- Kolkata, Mumbai, Delhi and Chennai daily generate 4000 tons, 11000 tons, 8390 tons and 4800 tons garbage respectively -
(a) Arrange the different quantity of garbage in ascending order.
(b) Which city generates the largest quantity of garbage?
(c) Which city generates the least quantity of garbage?

5. Write the difference between successor and predecessor numbers of any number.
6. Alok sold his wheat for rupees 88889, whereas Deepak sold for rupees 88879. Who sold his wheat at higher cost?
7. Form the smallest and the greatest number (without repeating any digit) with the following digits.
(a) 5,7,9,8,1 (b) 6,2,0,3,4,5
8. How many digits will be there in the successor of the greatest five digit number?

Great Mathematician

Srinivasa Ramanujan



Srinivasa Ramanujan Iyenger was one of the greatest Indian mathematicians. He was born in Tamil Nadu. He was a man of incredible talent. Though he had almost no formal training in Mathematics, he made substantial contribution to it. He was very curious by nature. He was very fond of asking questions. Sometimes his question bewildered his teacher. At the age of 10, he secured the highest marks in Primary Level Examination in the entire district. He originated various theorems and formulae for mathematics. His birthday, 22nd December is celebrated as 'Mathematics Day'.

