FOUR DIGIT NUMBER

Till now, we have learnt how to read and write two digit and three digit numbers.

We know that

- The smallest 2 digit number is 10.
- The largest 2 digit number is 99.
- The smallest 3 digit numbers is 100.
- The largest 3 digit numbers is 999.

Now we shall learn four digit numbers. When we add 1 to 999 then it become 1000 a four digit number.

Shown below

	H	T	O
	9	9	9
+			1
1	0	0	0

We call 1000 as thousand.

The smallest four digit number is 1000. In value chart, the fourth place from the right is called the thousand place.

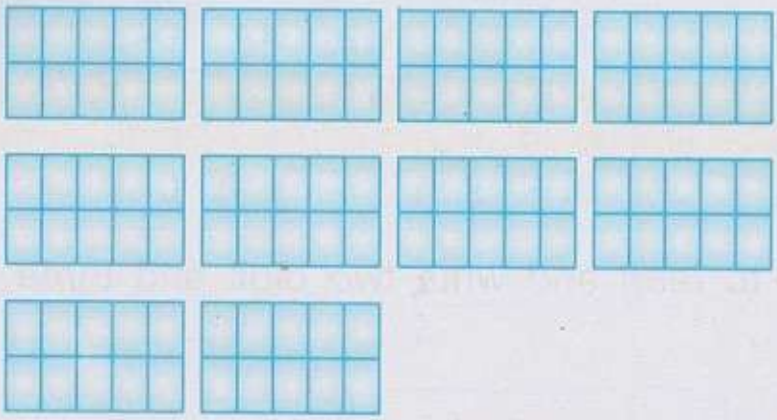
Th	H	T	O
1	0	0	0

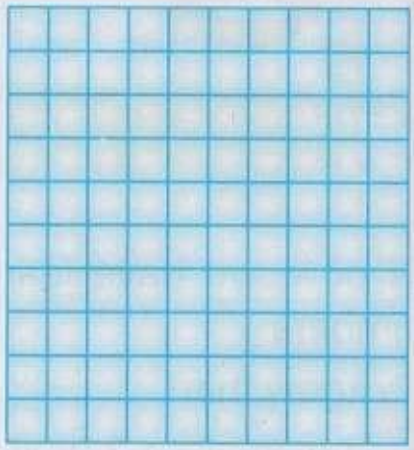
10 ones = 1 ten

10 tens = 1 hundred

10 hundreds = 1 Thousand

Here are ten ones equal to one ten.





Here are 10 tens equal to One hundred

After the digit of 999, comes thousand (1000) .

When we count 999 after that comes one thousand.

When we count 9 ones + 1 one = 10 (ten)

When we count 99 tens + 1 ten = 100 (hundred)

When we count 999 hundreds + 1 one = 1000 (one thousand)

- 999 is the greatest three digit number.
- 1000 is the smallest four digit number.

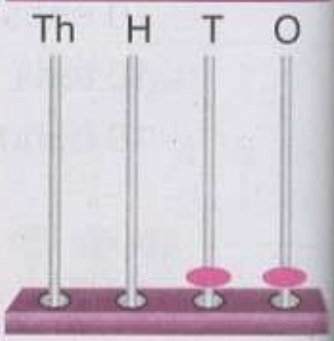
One thousand is the first four digit number.

999 + 1 = 1000

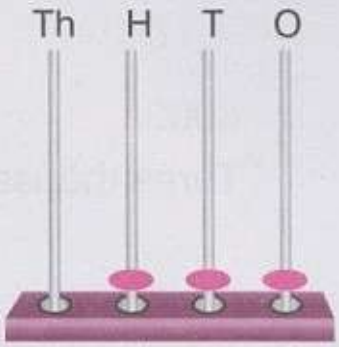
Revises of ones, tens, hundreds and thousands on the abacus.

When we write one is shown as

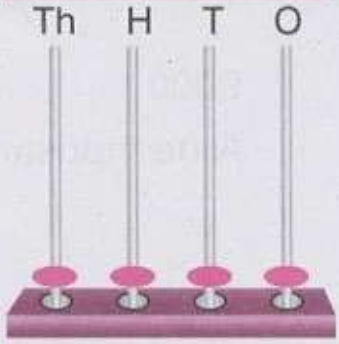
When we write tens is shown as



When we write hundred is shown as



When we write thousand is shown as



Example :

Three thousand four hundred twenty five.

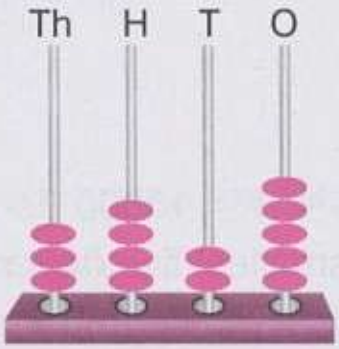
3425 =

Here three is a thousand.

Four is a hundred.

Two is a tens.

Five is a ones.

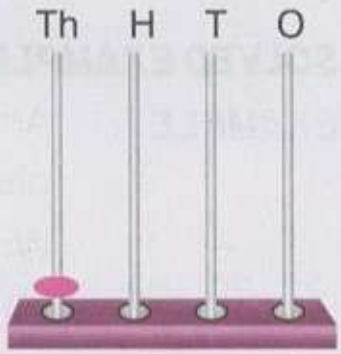


Th	H	T	O
3	0	0	0
+ 4	0	0	
	2	0	
		5	
3	4	2	5

Number one thousand to ten thousand.

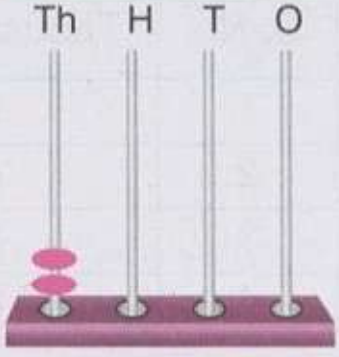
1000

One thousand



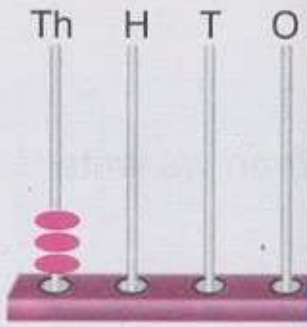
2000

Two thousand



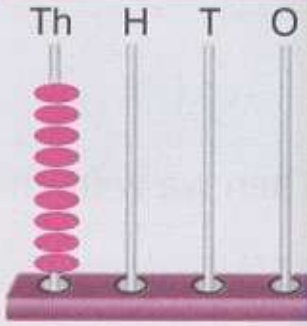
3000

Three thousand



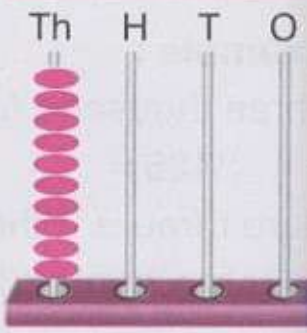
9000

Nine thousand



10000

Ten thousand



When we count 9999 + 1 = 10000 (ten thousand)

Ten thousand is the smallest five digit number.

9999 is the greatest four digit number or you can say last digit number.

SOLVED EXAMPLE :

EXAMPLE 1: Arrange the digit of each of the following number in th place value chart.

Write the number name of each.

(a) 9653 (b) 4967 (c) 8019 (d)9821

S. No.	Thousand 'Th'	Hundred 'H'	Tens 'T'	Ones 'O'
1.	9	6	5	3
2.	4	9	6	7
3.	8	0	1	9
4.	9	8	2	1

Now we write their number names as shown below :

(a) Nine thousand six hundred fifty three.

(b) Four thousand nine hundred sixty seven.

(c) Eight thousand nineteen.

(d) Nine thousand eight hundred twenty one.

EXAMPLE 2 : Write the numeral for each of the following:

(a) Three thousand seventy six.

(b) Nine thousand six hundred.

(c) Five thousand three hundred seven.

(d) Four thousand six.

SOLUTION : (a) 3076 (b) 9600 (c) 5307 (d) 4006

What do you see?

We see that is a number 3076.

The value of 6 is 6 ones.

The value of 7 is 7 tens.

The value of 0 is hundred but not readable.

The value of 3 is 3 thousand.

One more time,

The number is 9600.

Nine thousand six hundred.

Its respected, as

Th	H	T	O
9	6	0	0

When we saw the same digit on two different place their face value is according to the place.

EXAMPLE 3 : 7617

Seven thousand six hundred seventeen.

Here number 7 occurs in two different place.

So, both the places we read it seven but their face value is different according to their place.

The first number 7 is at ones place. Its value is seven o or 7.

The other number 7 is at thousand place. Its value i thousand or 7000.

So, the value of a digit in a numeral depends upon the pl where it occurs. This is known as the place value.

Read and write four digit numbers :

EXAMPLE 4 : 6431

SOLUTION : Six thousand four hundred thirty one.

EXAMPLE 5 : 9021

SOLUTION : Nine thousand twenty one.

Here 0 not read because the value of 0 is connect wit thousand that's why 0 hundred not readable.

1. Write all the numbers between :

(a) 1000 and 1010 ☐ (b) 7645 and 7651 ☐

(c) 6231 and 6240 ☐ (d) 3221 and 3228 ☐

(e) 8988 and 8995 ☐ (f) 6659 and 6664 ☐

(g) 4330 and 4336 ☐ (h) 7210 and 7218 ☐

2. Count forward and write the numerals :

(a) 1041, 1042, 1043, ____, ____, ____, ____, ____, ____, 1050

(b) 1051, ____, ____, ____, ____, ____, ____, ____, ____, 1060

(c) 1061, ____, ____, ____, ____, ____, ____, ____, ____, 1070

(d) 1071, ____, ____, ____, ____, ____, ____, ____, ____, 1080

(e) 1081, ____, ____, ____, ____, ____, ____, ____, ____, 1090

(f) 1091, ____, ____, ____, ____, ____, ____, ____, ____, 1100

6651, ____, ____, ____, ____, ____, ____, ____, ____, 6660

6661, ____, ____, ____, ____, ____, ____, ____, ____, 6670

6671, ____, ____, ____, ____, ____, ____, ____, ____, 6680

6681, ____, ____, ____, ____, ____, ____, ____, ____, 6690

6691, ____, ____, ____, ____, ____, ____, ____, ____, 6700

3. Count backward and write :

4370, ____, ____, ____, ____, ____, ____, ____, ____, 4361

3220, ____, ____, ____, ____, ____, ____, ____, ____, 3211

1009, ____, ____, ____, ____, ____, ____, ____, ____, 1000

7000, ____, ____, ____, ____, ____, ____, ____, ____, ____

3600, ____, ____, ____, ____, ____, ____, ____, ____, ____

6002, ____, ____, ____, ____, ____, ____, ____, ____, ____

8000, ____, ____, ____, ____, ____, ____, ____, ____, ____

4470, ____, ____, ____, ____, ____, ____, ____, ____, ____

4. Fill the boxes with the missing digit first one is done for you.

3576 = [3] thousands [5] hundreds [7] tens [6] ones.

4347 = [ ] thousands [ ] hundreds [ ] tens [ ] ones.

3018 = [ ] thousands [ ] hundreds [ ] tens [ ] ones.

8960 = [ ] thousands [ ] hundreds [ ] tens [ ] ones.

7206 = [ ] thousands [ ] hundreds [ ] tens [ ] ones.

2869 = [ ] thousands [ ] hundreds [ ] tens [ ] ones.

5. Write in numerals :

Four thousand three hundred twenty. [ ]

One thousand twenty five. [ ]

Five thousand four hundred. [ ]

Nine thousand two hundred five. [ ]

Two thousand sixty seven. [ ]

(f) Five thousand seventeen. ☐

(g) Eight thousand five hundred ninety two. ☐

(h) Six thousand two hundred thirty seven. ☐

(i) Seven thousand two hundred twenty. ☐

(j) Two thousand two hundred two. ☐

6. Write in words :

(a) 8924 = _____

(b) 3845 = _____

(c) 4020 = _____

(d) 6840 = _____

(e) 5560 = _____

(f) 3365 = _____

(g) 2143 = _____

(h) 7621 = _____

7. Write the number that comes :

BEFORE			AFTER	
(a)	☐	2220	(b) 8220	☐
(c)	☐	1051	(d) 9623	☐
(e)	☐	2020	(f) 5698	☐
(g)	☐	3161	(h) 4321	☐
(i)	☐	6453	(j) 6002	☐
(k)	☐	1234	(l) 7420	☐
(m)	☐	2004	(n) 2221	☐
(o)	☐	2043	(p) 3642	☐
(q)	☐	7331	(r) 7301	☐

8. Fill in the blanks :

(a)	4060	☐	4062	(b) 4269	☐ 4271
(c)	3691	☐	3693	(d) 5643	☐ 5645
(e)	9021	☐	9023	(f) 8880	☐ 8882
(g)	7624	☐	7626	(h) 5432	☐ 5434

NUMERALS IN EXPANDED FORMS :

A numerals, when expressed as a sum of the place values of its digit is said to be in its expanded form.

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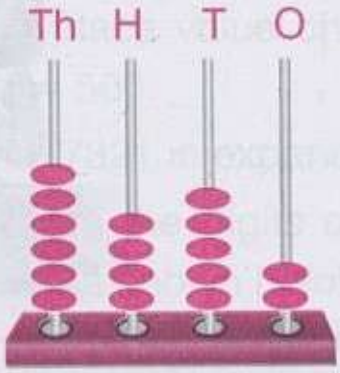
Consider the numeral 6452.

Arrange its digits in the place value chart as shown below.



6452 = 6 thousands + 4 hundreds + 5 tens + 2 ones

= 6000 + 400 + 50 + 2

Thus, the expanded form of 6452 is

6452 = 6000 + 400 + 50 + 2

We can also say that the short form of 6000 + 400 + 50 + 2 is 6452

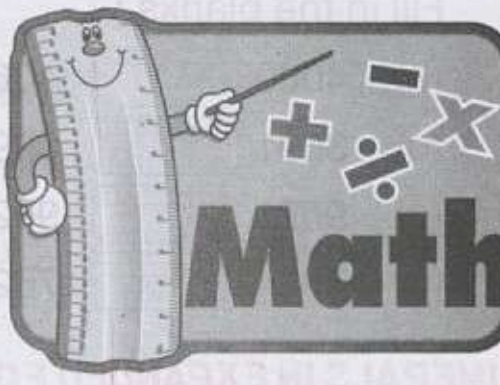
SUCCESSOR AND PREDECESSOR :

SUCCESSOR OF A NUMBER

The number that comes just after a particular number is called successor.

Clearly the successor of a number is more than the number.

FOR EXAMPLE :



6 is the successor of 5.

26 is the successor of 25.

1800 is the successor of 1799.

4000 is the successor of 3999.

7859 is the successor of 7858.

PREDECESSOR OF A NUMBER

The number that come just before a particular is called its predecess

Clearly the predecessor of number is 1 less than the number :

Thus, the predecessor of 30 is 29.

The predecessor of 439 is 438.

Remember 0 has no predecessor.

FOR EXAMPLE :

9 is the predecessor of 10.

36 is the predecessor of 37.

186 is the predecessor of 187.

999 is the predecessor of 1000.

2580 is the predecessor of 2581.

8888 is the predecessor of 8889.

Every four digit number has a predecessor of four digit except 1000. T

predecessor 1000 is 999 a three digit number.

SKIP COUNTING :

Suppose, starting with a given number we write some numbers wit

fixed gap between two successive numbers then such a counting

known as skip counting.

Counting by twos means there is a gap of between every t

successive number.

EXAMPLE 1: Write the face value and place value of

(a) 6 in 3621 (b) 5 in 6531

SOLUTION: (a) The face value of 6 in 3621 is 6.

Arrange the digits of 3621 in th place value chart as shown below :

Th	H	T	O
3	6	2	1

From the place value chart, we have the place value of 6 = 6 hundred = 600

(b) The face value of 6531 is 5.

Arrange the digits of 6531 in the place value chart as shown below:

Th	H	T	O
6	5	3	1

From the place value chart, we have the place value of 5 = 5 hundred = 500.

EXAMPLE 2: Write 7321 in expanded form.

SOLUTION: Arrange the digits of the given numeral in the place value chart as shown below :

Th	H	T	O
7	3	2	1

7321 = 7 thousands + 3 hundreds + 2 tens + 1 one

= 7000 + 300 + 20 + 1

Expanded form of 7321 is 7000 + 300 + 20 +1

EXAMPLE 3:

Write the following in short form :

(a) 3000 + 700 + 40 + 9

(b) 4000 + 300 + 5

(c) 9000 + 80 + 9

(d) 8000 + 200 + 7

SOLUTION : We have,

(a) $3000 + 700 + 40 + 9$

$= 3$ thousands $+ 7$ hundreds $+ 4$ tens $+ 9$ ones

$= 3749$

(b) $4000 + 300 + 5$

$= 4$ thousands $+ 3$ hundreds $+ 0$ ten $+ 5$ ones

$= 4305$

(c) $9000 + 80 + 9$

$= 9$ thousands $+ 0$ hundred $+ 8$ tens $+ 9$ ones

$= 9089.$

(d) $8000 + 200 + 7$

$= 8$ thousands $+2$ hundreds $+ 0$ ten $+ 7$ ones

$= 8207$

EXAMPLE 4 : Write the successor of each of the following numbers :

(a) 343 (b) 2340

SOLUTION : The successor of a number is obtained by adding to given numbers so,

(a) The successor of 343 is 344.

(b) The successor of 2340 is 2341.

EXAMPLE 5 : Write the predecessor of each of the following numbers :

(a) 300 (b) 5345

SOLUTION : We know that the predecessor of a number is 1 less t the given numbers so,

(a) The predecessor of 300 is 299.

(b) The predecessor of 5345 is 5344.

EXAMPLE 6 : Counting by two, write six numerals from 4480 onwards.

SOLUTION : Starting from 4480, we go on adding two

$\therefore$ The required numerals are :

4482, 4484, 4486, 4488, 4490, 4492, 4494

EXAMPLE 7 : Counting by four, write seven numerals form 8979 onwar

SOLUTION : Starting from 8979, we go on adding four

$\therefore$ The required numerals are

Exercise-2.2

1. Write the place value of 7 in 9867.
2. Write the place value of 4 in 5349.
3. Write the place value of 9 in 6908.
4. Write the place value of 6 in 6843.
5. Write the face value of 3 in 7832.
6. Write the face value and place value of 8 in 8965.
7. Write the place value of 4 in 4549.
8. Write the face value and place value of 2 in 7231.
9. Write the place value of each digit in 5321.
10. Write the place value of each digit in 6738.
11. Write each of the following in the expanded form :

    (a) 3942 (b) 4567 (c) 8973 (d) 4690

    (e) 8521 (f) 2598 (g) 9157 (h) 2800

12. Write each of the following in short form :

    (a) 6000 + 500 + 70 + 4 = _____

    (b) 8000 + 400 + 30 + 0 = _____

    (c) 4000 + 60 + 7 = _____

    (d) 3000 + 500 + 60 + 3 = _____

    (e) 6000 + 600 + 50 + 8 = _____

13. Write the successor of the given number :

    (a) 468 (b) 983 (c) 1268 (d) 5208 (e) 6788

    (f) 8989 (g) 7000 (h) 4000 (i) 9089 (j) 8475

14. Write the predecessor of the given number :

    (a) 5108 (b) 4296 (c) 4372 (d) 4231 (e) 7525

    (f) 7203 (g) 8179 (h) 5095 (i) 4880 (j) 8940

15. Counting by tens, write the numerals form :

(a) 2210 to 2260 (b) 3406 to 3456

(c) 4880 to 4930 (d) 7832 to 7882

(e) 8956 to 9006 (f) 9870 to 9920

16. Counting by hundreds, write the numerals form :

(a) 3490 to 3990 (b) 2100 to 2600

(c) 7587 to 8087 (d) 8993 to 9493

17. Write the successor and predecessor of the given number :

	Number	Successor	Predecessor
(a)	5410	_____	_____
(b)	3497	_____	_____
(c)	7035	_____	_____
(d)	9990	_____	_____
(e)	6000	_____	_____
(f)	4629	_____	_____

18. Fill in the blanks. The first one is done for you.

(a) The biggest one digit number is [9].
It successor is [10] which is the smallest two digit number.

(b) The biggest two digit number is [ ].
It successor is [ ] which is the smallest three digit number [ ]

(c) The biggest three digit number is [ ].
It successor is [ ]. Which is the smallest four digit number [ ]

(d) The biggest four digit number is [ ].
It is successor is [ ]. Which is the smallest five digit number [ ]

19. Write the predecessor and successor of the given number :

	Predecessor		Successor
(a)	321 _____	(a)	898 _____
(b)	2040 _____	(b)	2467 _____

(c) 1398 _____ (c) 4429 _____

(d) 8620 _____ (d) 8120 _____

20. Look at the pattern and fill in the blanks.

(a) 4321, 4322, 4323, _____, _____, _____, _____, _____, _____

(b) 6293, 6294, 6295, _____, _____, _____, _____, _____, _____

(c) 3604, 3605, 3606, _____, _____, _____, _____, _____, _____

(d) 7205, 7203, 7201, _____, _____, _____, _____, _____, _____

21. Fill in the blanks first one is done for you :

(a) 2 thousands and 3 hundreds 4 tens 2 ones = 2342

(b) 6 thousands 0 hundred 3 tens 0 one = _____

(c) 8 thousands 4 hundred 0 tens 9 ones = _____

(d) 5 thousands 0 hundred 0 tens 5 ones = _____

ORDER RELATION :

We have already learnt the method of finding the greatest of the two given numbers upto 3 digit number. Now we shall learn here the method of finding the greatest of the given 4 digit number.

We follow the same rules for large numbers.

1. Ascending order
2. Descending order

1. ASCENDING ORDER :

In ascending order, we arrange the numbers starting from the lowest number to the greatest numbers.

2. DESCENDING ORDER :

In descending order, we arrange the numbers starting from the greatest number to the lowest numbers.

Ascending or increasing

1

2

3

4

Descending or decreasing

4

3

2

1

COMPARISON OF NUMBERS :

Numbers are compared according to the number of digit and position digits.

Check Th, H, T, O

You know the rules to compare numbers upto 3 digits. The same rule used in comparing 4 digit numbers.

EXAMPLE 1: (a) $46 > 8$ (b) $296 > 180$

EXAMPLE 2 : Let us compare 7894 and 6721.

Both are 4 digit numbers.

Compare their digit at the left most place. This digit is 7 in the first number and 6 is the second number.

and, $7 > 6$

so, $7894 > 6721$

Rule 1 : A numeral containing more digits is greater.

Rule 2 : If two numerals contain the same number of digits the numeral having greater digit at the left most place will be greater.

EXAMPLE 3 : 6921 5329

$6 > 5$

$\therefore$ $6921 > 5329$ or $5329 < 6921$

Rule 3 : If the left most digits are also the same we go to next digit from left and compare.

EXAMPLE 4 : 8639, 8546 and 9341, 9361

8 6 3 9 and 8 5 4 6 : $8 = 8$, $6 > 5$

9 3 4 1 and 8 5 4 6 : $9 = 8$, $3 < 5$, $4 = 4$

$\therefore$ $8639 > 8546$ or $8546 < 8639$

Rule 4 : If the second digits from the left are also the same we go next digit from left and compare.

$\therefore$ $9341 < 9361$ or $9361 > 9341$

Rule 5 : First check the thousands (Th) digits second the hundre

(H) digits, third, the tens (T) digits, fourth (and last), the ones (O) digits.

EXAMPLE 5 : 4567, 4876

Here, compare 4567 and 4876.

Thousand digits are same.

At hundred place : $5 < 8$

so, $4567 < 4876$ or $4876 > 4567$

EXAMPLE 6 : Let us compare 5409 and 5446.

Both have the same digit at thousand place, number 5.

Both have the same digit at hundred place number 4.

Let us compare their digit tens place, this digit is 0 of first number and 4 in the second number so, $0 < 4$.

so, $5409 < 5446$

Exercise-2.3

1. Compare the numbers in each of the following pairs and write the appropriate symbol > or < in each box.

(a) 360 ☐ 390 (b) 302 ☐ 230

(c) 610 ☐ 640 (d) 4032 ☐ 4320

(e) 1852 ☐ 1585 (f) 2001 ☐ 2010

(g) 4009 ☐ 4012 (h) 3545 ☐ 3554

2. Encircle the largest number. First one is done for you.

(a) 3040, 3000, 3060, 3950. (3999), 3890

(b) 4982, 4892, 2984, 8924, 9284, 9842

(c) 1699 9691, 6991, 9619, 6119, 9169

(d) 5160, 6051, 6510, 6501, 5061, 6150

(e) 8985, 9858, 5898, 8598, 8895, 5988

3. Encircle the smallest number. First one is done for you.

(a) 7507, 7550, 7057, 5077, 7570, 7075

(b) 4360, 3640, 6304, 3460, 4036, 4038

(c) 7502, 7050, 7250, 7520, 7025, 7205

(d) 8731, 3645, 4842, 3695, 1887, 4248

(e) 5404, 4250, 5730, 3750, 7530, 7305

4. Arrange in ascending order :

(a) 9529, 8620, 5928, 3042, 4032, 432

(b) 4635, 4546, 5436, 1220, 1345, 5867

(c) 3508, 3602, 203, 402, 190, 150

(d) 5217, 1725, 1275, 1527, 2175, 2571

(e) 1625, 5216, 2561, 1615, 6125, 5721

5. Arrange in descending order :

(a) 1002, 1110, 1200, 1020, 2110, 2100

(b) 4256, 163, 593, 564, 3054, 5203

(c) 7126, 6127, 7216, 6721, 7612, 2571

(d) 5054, 3403, 5043, 5408, 1625, 1265

(e) 9529, 8620, 5982, 6872, 5420, 2086

6. Give the successor of the following :

(a) 645 _____ (b) 4323 _____

(c) 5921 _____ (d) 7689 _____

(e) 9321 _____ (f) 8000 _____

7. Give the predecessor of the following :

(a) 9321 _____ (b) 8021 _____

(c) 6432 _____ (d) 8002 _____

8. Write four 3 digit numbers formed by using digit 3, 2, and 9.

9. Write six 4 digit numbers formed by using the digits 8, 9, 3, and 2.

10. Write true or false :

(a) Successor of a number comes just before the number.

(b) The largest three digit number is the predecessor of smallest 4 digit number.

(c) Successor of the largest 2 digit number is the largest 3 digit number.

(d) 9304 is the largest numerals formed by digit 9, 3, 0, 4.

(e) The largest four digit number is 9999. The smallest four digit number is 1111.

11. (a) Write all the 4 digit numbers using 7261.

(b) Write all the 3 digit number using 349.

(c) Write all the 2 digit number using 6 and 2.

12. Write the largest 4 digit number formed by using the digits :

(a) 3, 5, 8, 9 (b) 2, 0, 9, 6 (c) 6, 9, 7, 3

13. Write the smallest 4 digit number formed by using the digits.

(a) 9, 1, 3, 8, (b) 2, 0, 4, 1 (c) 3, 2, 6, 9

14. Fill in the blanks :

Predecessor		Number	Successor
_____	(a)	12	_____
_____	(b)	297	_____
_____	(c)	698	_____
_____	(d)	2654	_____
_____	(e)	8432	_____

15. Ramesh spent 4361 rupees and Ram spent 6293 rupees on bicycle. Who spent more money?