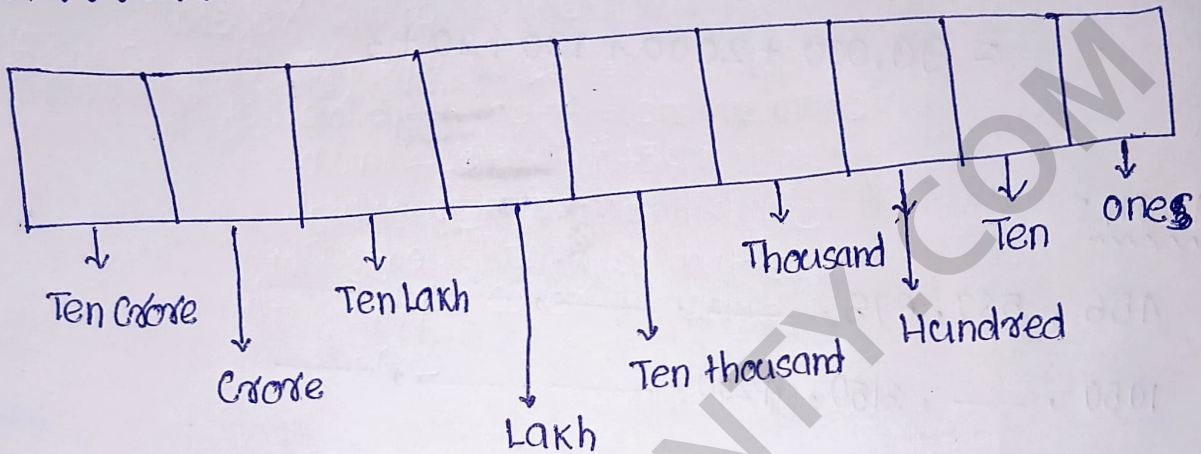


# CHAPTER-01

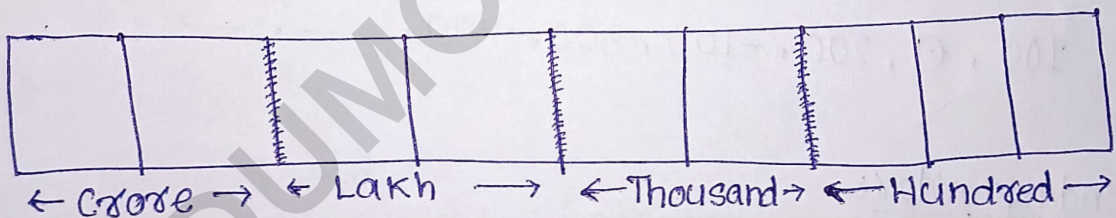
①

## We the Travellers-01

Hindu-Arabic place value system:



Name of a Number:



Example: (i) 1,23,45,672 : One Crore twenty-three lakh  
fourty-five thousand six hundred  
Seventy-two.

(ii) 25,67,82,197 : Twenty-five crore. Sixty-seven lakh  
eighty-two thousand one hundred  
ninety-seven.

(Prepared by B. Mohanty)

## Expanding form

(2)

$$1,380 = 1 \text{ thousand} + 3 \text{ hundred} + 8 \text{ tens} + 0 \text{ one's}$$
$$= 1,000 + 300 + 80 + 0$$

$$92,123 = 9 \text{ ten thousand} + 2 \text{ thousand} + 1 \text{ hundred} + 2 \text{ tens} + 3 \text{ ones}$$
$$= 90,000 + 2,000 + 100 + 20 + 3$$

## Pattern:

(i) 456, 567, 678, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

(ii) 1050, \_\_\_\_\_, 3150, 4200, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

(iii) 100, 201, 302, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, 706

(iv) 1, 1, 2, 3, 5, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

(v) 100, 0, 200, -100, 300, -200, \_\_\_\_\_, \_\_\_\_\_

## Ascending order:

Arranging numbers from smallest and greatest is called an ascending order.

It is also called an increasing order.

## Descending order:

Arranging number from biggest to smallest is called an descending order.

It is also called an decreasing order.

Q1. Arrange the following in ascending order.

3

(i) 1957, ~~9157~~, ~~5719~~, 7591, 1579, 5197

(ii) 204162, 221426, 214235, 206142, 224216, 212435

(iii) 49986, 48968, 94868, 46988, 94688

Q2. Arrange the following in descending order.

(i) ~~391561~~, 395116, 396151, 391156, 395611

(ii) 161539, 615193, 156139, 619315, 153961

(iii) 20262025, 20622025, 20252026, 2052026, 20202625

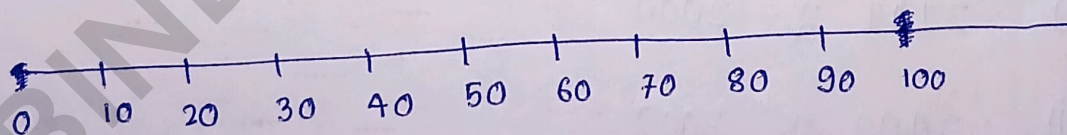
### NEAREST OF A NUMBER

I. Nearest to Ten:



Focus of last two digit

Difference of number is 10 and multiple of Ten.



(i) 525  $\approx$  530

(ii) 137  $\approx$  140

(iii) 221  $\approx$  220

(iv) 225  $\approx$  230

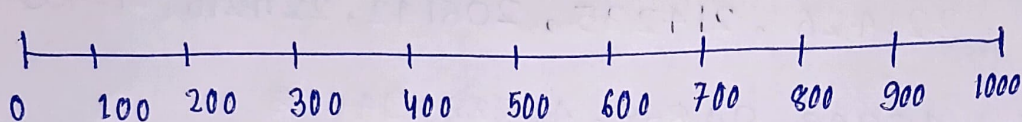
(v) 199  $\approx$  200

## II. Nearest to Hundred:

4

Focus on last three places

Difference of the number is 100 and multiple of 100.



(i)  $1201 \approx 1200$

(ii)  $1299 \approx 1300$

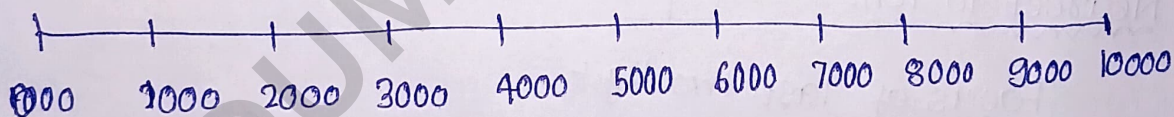
(iii)  $1999 \approx 2000$

(iv)  $1450 \approx 1500$

## III. Nearest to thousand:

Focus on last four places

Difference of number is 1000 and multiple of 1000.



(i)  $2101 \approx 2000$

(ii)  $3499 \approx 3000$

(iii)  $7999 \approx 8000$

(iv)  $5500 \approx 6000$

(v)  $68500 \approx 69000$

Number	Nearest Tens	Nearest Hundreds	Nearest Thousands
3176	3180	3200	3000
4017	4020	4000	4000
5789	5790	5800	6000
8203	8200	8200	8000

### # Numbers Quiz

Follow the following steps:

- (i) Take any two different digits
- (ii) Make two 2-digits numbers using them
- (iii) Subtract the smaller number from bigger number.

Now, use the two digits in the difference and repeat steps (b) and (c).

Continue this process until you get a 1-digit number.

Example

(i) Consider two digits 3 and 7

We get two numbers 37 and 73

$$\text{Difference } 73 - 37 = 36$$

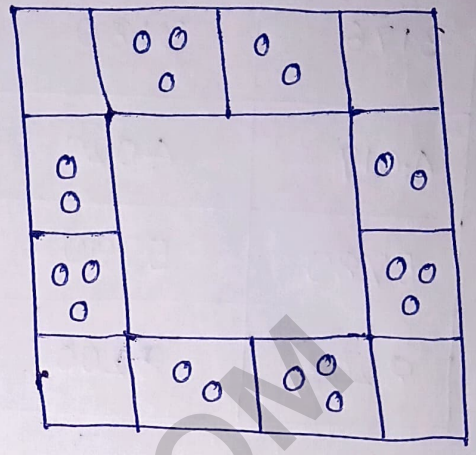
$$\text{(ii) Again } \begin{array}{r} 63 \\ -36 \\ \hline 27 \end{array} \rightarrow \begin{array}{r} 72 \\ -27 \\ \hline 45 \end{array} \rightarrow \begin{array}{r} 54 \\ -45 \\ \hline 9 \end{array}$$

(9) which is a single digit number

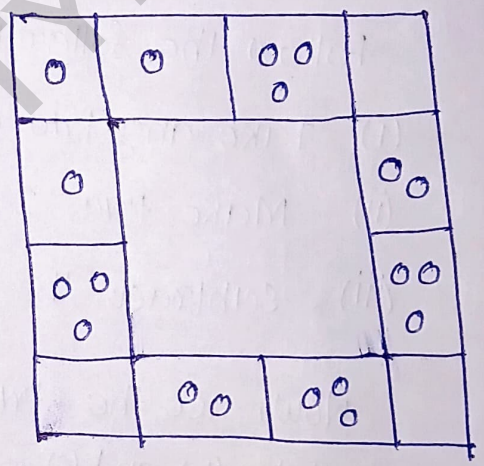
# King's Horses

There are 20 horses in a stable as in the figure.

The small circle represent each horse.



(i) If you took 1 horse then arranged remaining 19 horses such that in each side it count 5 horses.



(ii) If you took 1 more horse then arranged remaining 18 horses such that in each side it count 5 horses.

Repeat this process and see upto <sup>minimum</sup> how many horses you need to arranged in each side to count 5 horses.