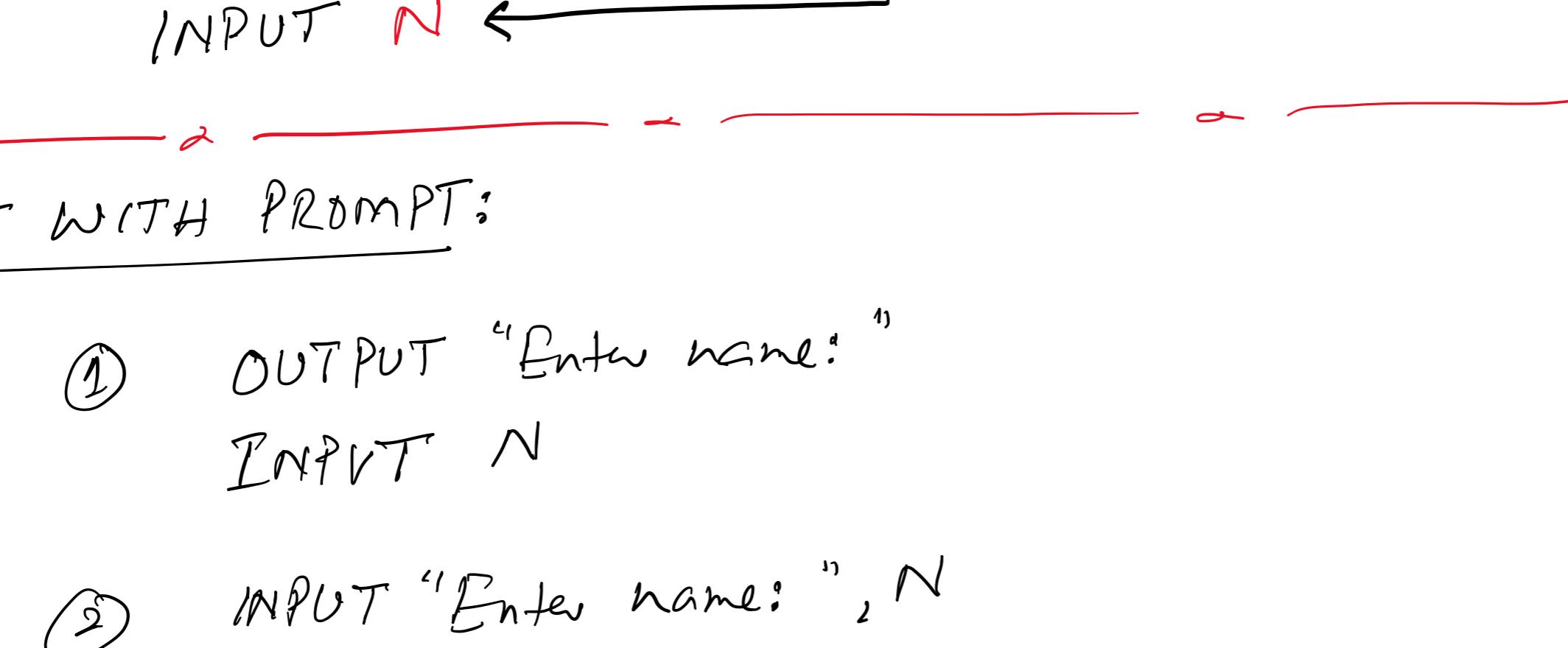


- \* - INPUT / READ
- \* - OUTPUT / PRINT
- \* - PROMPT
- \* - COUNTING
- \* - TOTALISING
- \* - SUM / ASSIGNMENT
- \* - COUNT BASED LOOPS
- \* - EXTREME VALUES.

INPUT: Collection of data through keyboard in variables.

OUTPUT: Showing data over the screen, either from the variable or other data structure or constants (variables like strings). Those strings which makes user enter the data from keyboard are output too but called "PROMPT".



### INPUT WITH PROMPT:

① OUTPUT "Enter name:"  
INPUT N

② INPUT "Enter name:", N

### COUNTING:

$$\begin{array}{l} a \leftarrow a + 1 \\ a = a + 1 \end{array} \quad \begin{array}{l} x = x + 1 \\ x \leftarrow x + 1 \end{array}$$

COUNT COUNT

When variables on the right and left of the assignment operator ( $=, \leftarrow$ ) are same and there is  $+1$  operation; it is said to be "Counting".

$a \leftarrow a + 1$  This is not counting  $\Leftrightarrow$   
it is not  $+1$ .

### Totalising:

$$\begin{array}{l} a \leftarrow a + b \\ x \leftarrow x + y \end{array}$$

Same Same

When in an expression variables on the right and left of assignment operator ( $\leftarrow, =$ ) are same and are being added to another variable; it is said to be "Totalising".

### Sum / Assignment:

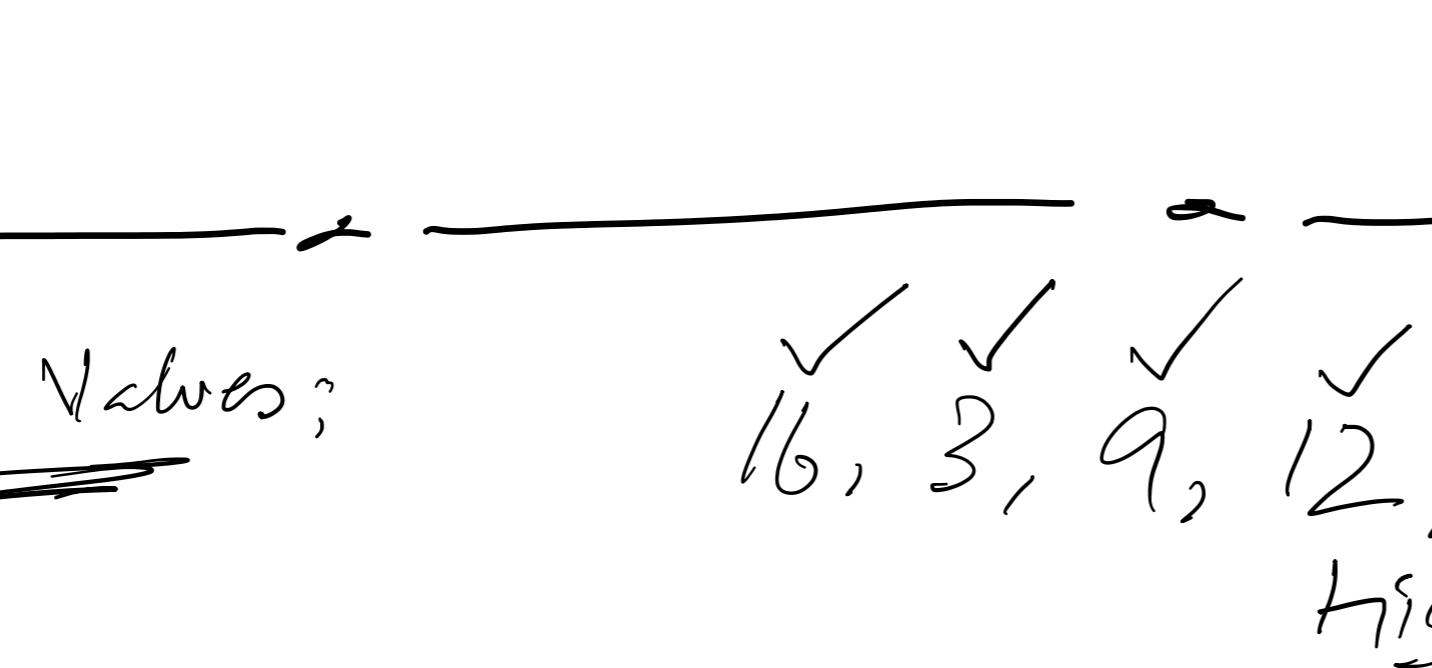
$$A = B + C$$

When different variables are added and are assigned to a third variable; it is said to be sum or simply assignment.

$$\begin{array}{l} B = A + A \\ C = B + 2 \\ x \leftarrow a + 1 \end{array}$$

### COUNT BASED LOOPS:

#### "Iteration"



Count Based  
- FOR ... NEXT

Condition Based  
- WHILE ... END WHILE  
- REPEAT ... UNTIL

### COUNT BASED LOOPS

OUTPUT "Zafar"  
OUTPUT "Zafar"  
OUTPUT "Zafar"

For  $n \leftarrow 1$  to 50  
    OUTPUT "Zafar"  
    Next

$\frac{n}{1}$
$\frac{2}{2}$
$\frac{3}{3}$
$\frac{4}{4}$
$\frac{5}{5}$
$\vdots$
500

<u>n</u>	<u>Highest</u>	<u>Lowest</u>
0	-1000	1000
16	16	16
3	16	3
9	16	3
12	16	3
19	19	3

For Count  $\leftarrow 1$  to 6

INPUT n

IF  $n > \text{Highest}$  THEN  $\text{Highest} \leftarrow n$   
IF  $n < \text{Lowest}$  THEN  $\text{Lowest} \leftarrow n$

Next Count

OUTPUT Highest, Lowest