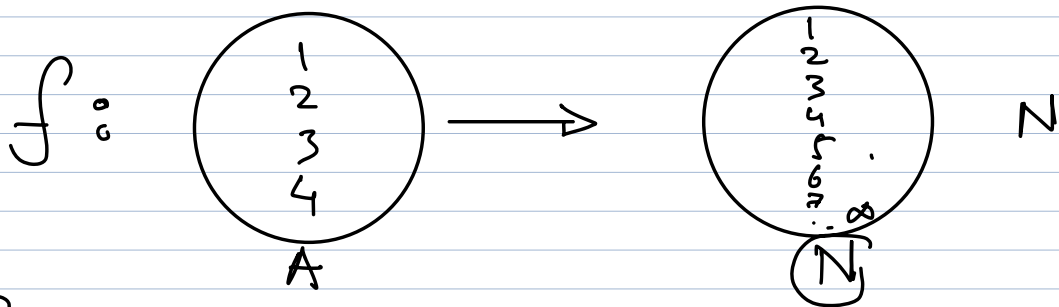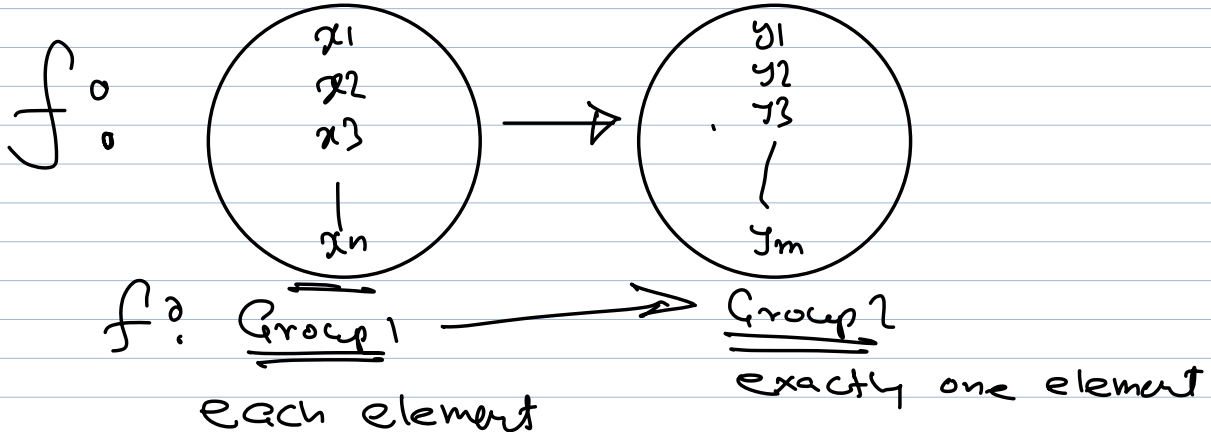- 101 Zen stories
- Beginners Mind Has Many Possibilities and Expert's mind has few
- Osho -> Zen Master Discourses
- Tich Nath Han

#--

$f:$

x_1 x_2 x_3 $\vdots$ x_n $\longrightarrow$ y_1 y_2 y_3 $\vdots$ y_m

$f:$ <u>Group 1</u> $\longrightarrow$ <u>Group 2</u>

each element   exactly one element

$f:$

1 2 3 4   A $\longrightarrow$ 1 2 3 4 5 6 7 ... ∞ (N)   N
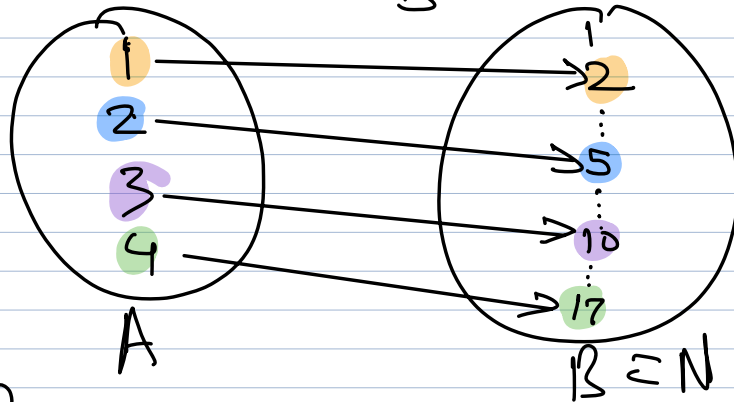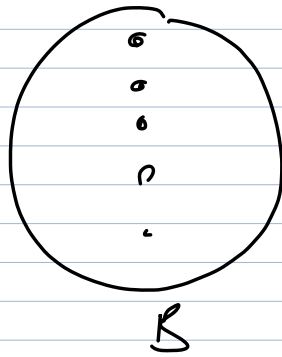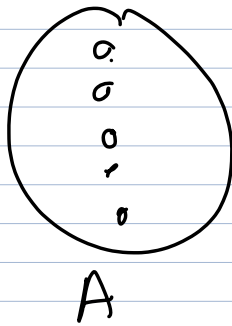
$\{$ $(1, 3)$

$(2, 9)$

$(3, 17)$

$(4, 5992)$ $\}$

$f: A \rightarrow N$

Group = Set

Group member = Element of set

$f: A \rightarrow N$ Group 1 = Domain of function

Group 2 : Co-domain of function

$$f : A \longrightarrow B$$

$$+1$$

$$(\text{element})^2 + 1$$

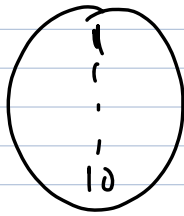let n be element in A ($=$ Domain)

then $n^2 + 1$ is it's pair in B ($=$ codomain)

$$(n, f(n))$$
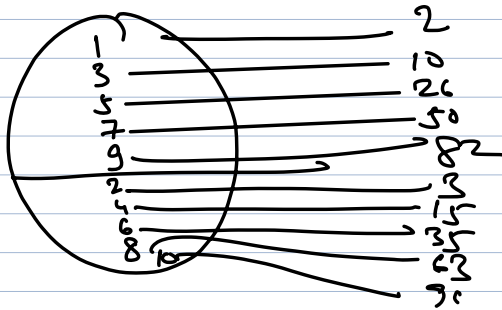
$$\uparrow \qquad \uparrow$$

$$A \qquad B.$$

$$(n, n^2 + 1)$$

$$f(n) = n^2 + 1$$

$$f(n=4) = 4^2 + 1 = \underline{17}$$

$$n^2+1$$

$$n^2-1$$

$$f(n) = \begin{cases} n^2-1 & \text{if } n \text{ is even} \\ \\ n^2+1 & \text{if } n \text{ is odd} \end{cases}$$

$$D_f = \{1, \longrightarrow 10\}$$

$$n \times f(n-1) \qquad \text{if} \quad n \geq 1$$

$$f(n) =$$

$$1 \qquad\qquad \text{if } n = 0$$

$$\underline{\underline{f(4)}}$$

$D_f : \mathbb{N}$

$CoD_f : \mathbb{N}$

4

$$\therefore 5 \times f(4)$$

$$f(5) =$$

$$5 \times 4 \times f(3) \qquad\qquad 5 \times 4 \times 3 \times f(2)$$

$$\cdots \times \quad \| \qquad\qquad\qquad\qquad f(3)$$

$$\cdots f(4) \qquad\qquad\qquad f(4)$$

$$f(5)$$

$$5 \times 4 \times 3 \times 2 \times f(1)$$
$$3 \times f(2)$$
$$4 \times f(3)$$
$$5 \times f(4)$$
$$f(5)$$

$$5 \times 4 \times 3 \times 2 \times 1 \times f(0)$$

$$1 \times 1$$
$$f(1)$$

$$3 \times f(2) = 2 \times 1$$

$$f(3) = 3 \times 2 \times 1$$

$$4 \times f(3)$$
$$4 \times 3 \times 2 \times 1$$

$$5 \times f(4)$$
$$5 \times 4 \times 3 \times 2 \times 1$$
$$f(5) = 120$$

$$f(n) = \begin{cases} n \times f(n-1) & \text{if } n > 0 \\ \textcircled{1} & \text{if } n = 0 \end{cases}$$

```
def f(n):
    if n==0:
        return (1)
    else
        y = n*f(n-1)
        return (y)
```

---

f(5)