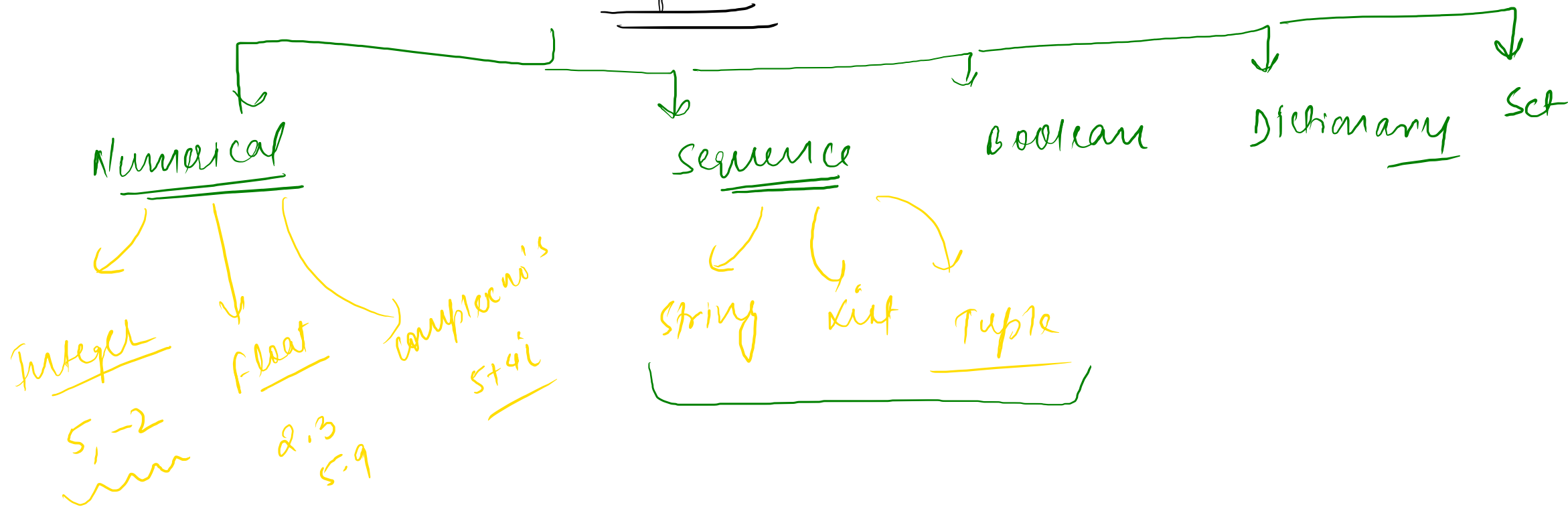


# Type of Data



sequence } group of elements

String }

group/sequence of characters }

name = ('Vishal' }

↑

name = Vishnu  
0 1 2 3 4 5

→

} name[4] → w  
name[5] → a }

↖ [0, length-1]  
[-length, -1]

String } Immutable

a = 'Vishna'  
b = 'Vishna' X

- ① immutable } easy and safe to work in the concurrent env.
- ② saving space

# String slicing



portion of the pizza/cake  
slice

str = ('vishwa mohan')  
0 1 2 3 4 5 6 7 8 9 10 11

          
slice of a string]

str[a:b] → [a, b-1] will be the slice

int datatype

- ↳ collection of elements
- ↳ ordered ↳ index
- ↳ Mutable

↳ different type]



Array

tuple

← immutable

ordered  
sequence  
different type of data

Dictionary  $\rightarrow$  ① (key, value)

Map (Java)

② unordered

③ Mutable

④ key has to be unique

⑤ Heterogeneous data



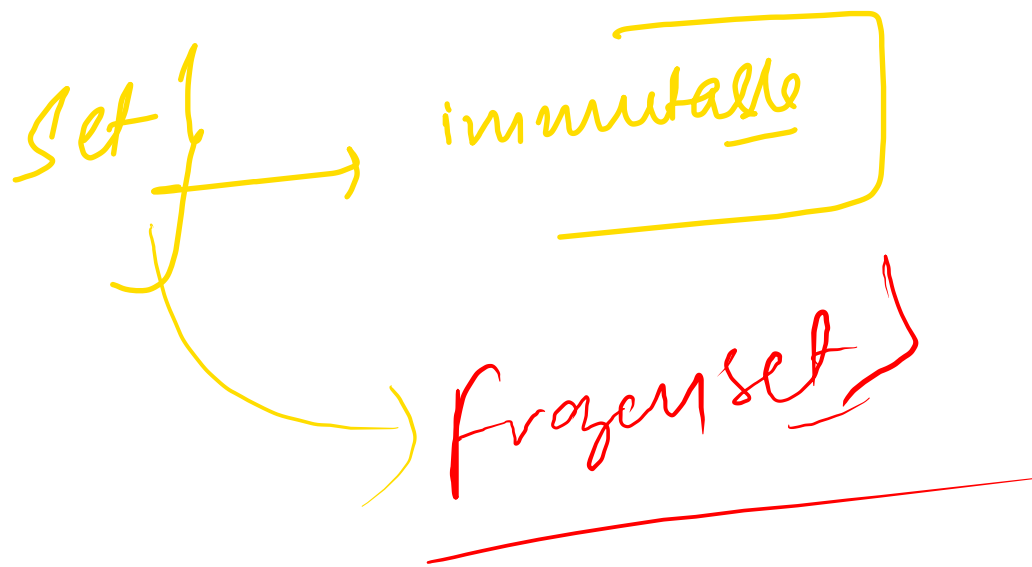
set } → ① no duplicates | elements are unique

② Mutable

③ Un-ordered

④ Heterogeneous

multiple data type



Type casting

Type 1  $\rightarrow$  Type 2

