Core Data Structures

1. LIST.
2. DICTIONARY
3. TUPLE
4. SET
→ INTERFACE
METHODS, FUNCTIONS, PROCEDURE

5. NUMPY ARRAY ⟶ GENERAL N-DIMENSIONAL VERSION } DATA SCIENCE
6. PANDAS DATA FRAMES
7. PYSPARK DATAFRAMES

8. RDD ⟶ RESIDUAL DISTRIBUTED DATASET.
9. SQL TABLE
} DATA SCIENCE

PROTOTYPE $\longrightarrow$ MASS PRODUCTION

$\downarrow$
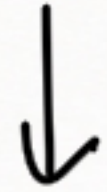
FINAL

ORIGINAL WORKING PRODUCT $\longrightarrow$ Final Draft of your Look

$\longrightarrow$ Original working prototype of motorcycle

$\downarrow$

MASS PRODUCTION $\longrightarrow$ CREATING MULTIPLE COPIES of ORIGINAL WORKING PRODUCT $\longrightarrow$ INSTANTIATION
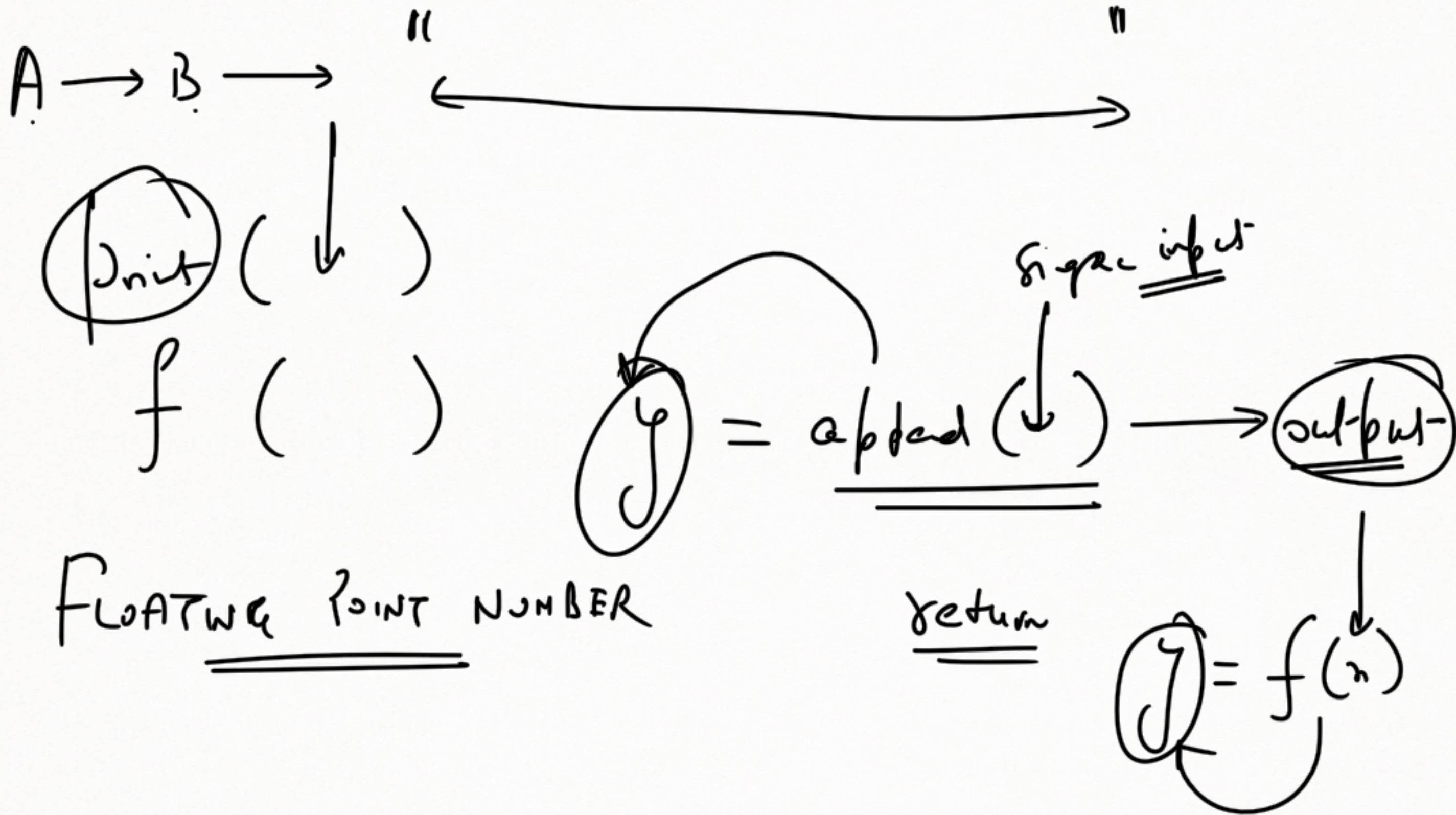
INSTANCE

LIST, DICTIONARY, TUPLE, SEP $\longrightarrow$ ORIGINAL FINAL WORKING. OF LIST, DICTIONARY, TUPLE AND SEP

list_instance = $[18]$

method, function $\longrightarrow$ Mathematical function

$y = f(x, 2, p, z, r) \longrightarrow$ SIGNATURE OF FUNCTION

$$y = f\left(\downarrow\right)$$

$$\dfrac{f}{}$$

append $(\downarrow) \longrightarrow y$

$$A \longrightarrow B \longrightarrow \quad "\quad \xleftarrow{\hspace{6cm}} "$$

$$\boxed{init} \left(\downarrow \right)$$

$$f \left(\quad \right)$$

<u>FLOATING</u> POINT NUMBER

space <u>input</u>

$$y = \underline{append} \left(\downarrow \right) \longrightarrow \boxed{\underline{output}}$$

$$\underline{return}$$

$$y = f(x)$$

ITERABLE $\longrightarrow$ ITERATE

$\quad\quad\quad\quad\quad\quad\quad\quad\quad\quad\quad\quad$ LIST $\quad$ }
$\quad\quad\quad\quad\quad\quad\quad\quad\quad\quad\quad\quad$ DICTIONARY $\quad$ } ITERABLES

$y = [\;18.11,\;\;\; "This\;is\;a\;first-class\;....",\;\; 18,\;\; 18,\;\; 19,\;\; 19.12\;]$

(circled: 0) ... 1 ... 2 ... 3 ... 4 ... 5

$print\;(y[5]) \longrightarrow 19.12$

( )
$y\;(5)$ $\quad$ $y[5]$ $\quad$ [ ]