

Implementing Value class other funn

$$A) c = \underline{\text{value}(2.0)} + \underline{\text{value}(3.0)} - \text{value}(5.0)$$

this is correct

$c = \text{value}(2.0) + 3.0 \Rightarrow$ this will give error.

bcz, $\text{value.add}(\text{float})$, but add funn in value class expect both args to be value object

here, $\underline{\text{self}} = \text{value}$, other = float ✓

so, we have to convert float to a value object. (see side.)

$$c = \underline{2.0} + \underline{\text{value}(3.0)}$$

float value.

$$c = \underline{\text{self.add}(\text{value})}$$

float.add (value)
self other

(so, we will get error, we cannot sum float & value)

To resolve this issue, add dunder method.

$$c = \frac{2.0 + \overbrace{\text{value}(3.0)}^{\text{other}}}{\overbrace{\text{self}}^{\text{self}}}$$

$\text{float}. \text{add}(\text{value})$

So, use radd .

$$\in \Rightarrow \overbrace{\text{value}. \text{radd}(\text{float})}^{\text{self}}$$

(we know that, $a+b = b+a$)

(see code)

for __add__ we have $+$ as a symbol,

for __radd__ do we have any other symbol?

No, if add function not mod R, then
 radd is automatically called,



Similarly multiplication will be exactly similar to add.

A) $c = \text{value}(2.0) * \text{value}(3.0)$

$c = \text{value}(6.0)$ ✓
 (value.mul(value))

B) $c = \text{value}(2.0) * 3.0$ (error)

(value.mult(float))
(error will be float has no object data)

To correct if we need to convert
float \rightarrow value.

C) $c = 2.0 + \text{value}(3.0)$

float.sum(value) (err. cannot
sum float & value)

Value.sum(float)
Self Other

(but we know that, $a+b = b+a$)
(see code)

a) $a = \text{Value}(2.0)$ (this is correct)

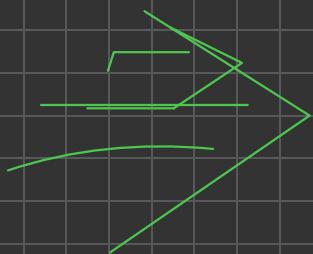
$a = -\text{Value}(2.0)$ (this will give
err, as we have not
implemented --neg--)

$a = -\text{Value}(2.0)$

$\text{Value}.\text{neg}()$
 $\xrightarrow{\text{self.}}$

$-\text{value}(2.0) \approx \text{value}(2.0) * (-1)$

\downarrow
 $\text{Value}.\text{mul}(-1)$
this is
double-



`baum = ?`

`c = (value(2.0)) ** 3` (this will give error)

`--baum--` → dunder funn

`baum` → int / float

`Value.bau (int / float)`
`(value(2.0)) * bau (3)`

`(value(2.0)) ** 3`

`3` → `** 3` → `value(8.0,
 (2.0,
 , ** 3))`