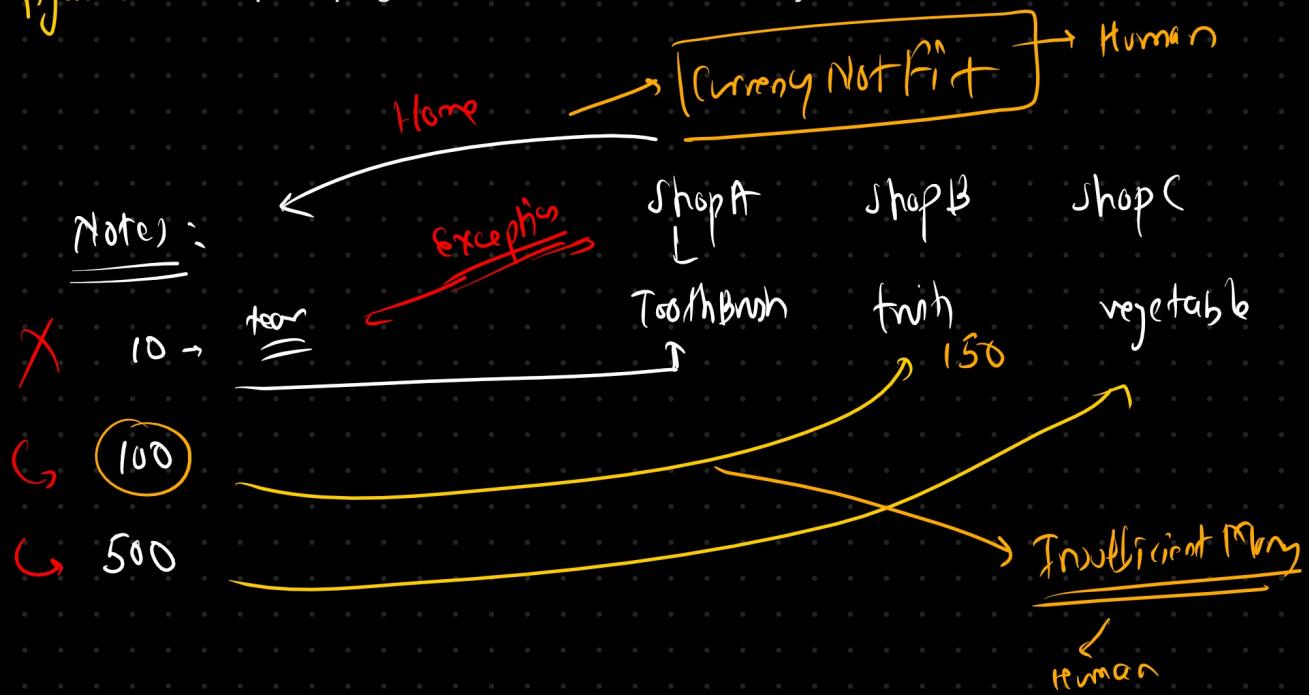


26-04-2025

Agenda - Exception, program termination , Classes and objects

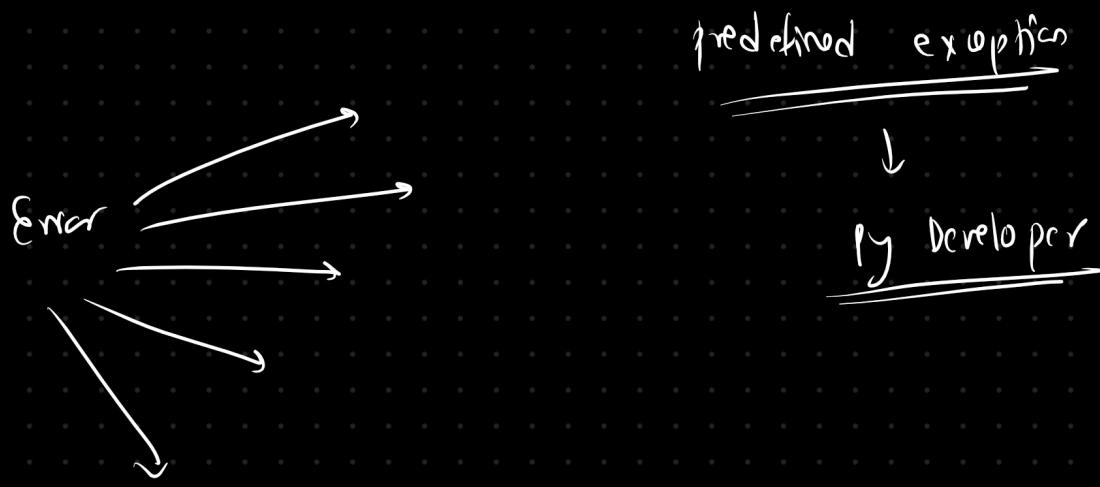


Exception Handling

Try , Except , else , finally

try :

except :



try-except

try:

usual code

except:

print("Hello")

```
try:  
    for i in range(5):  
        a = input("Enter a number")  
        a = int(a)  
        print(a)  
    except ValueError:  
        print("Issue with the program")  
  
print("Hello world")
```

i ← Hello

throw exception



Terminating

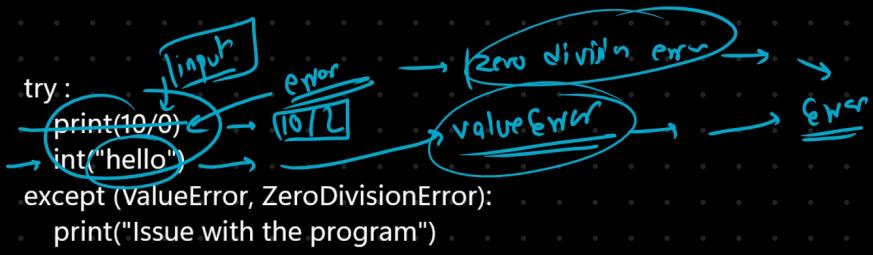
def add(a, b):

c = a + b

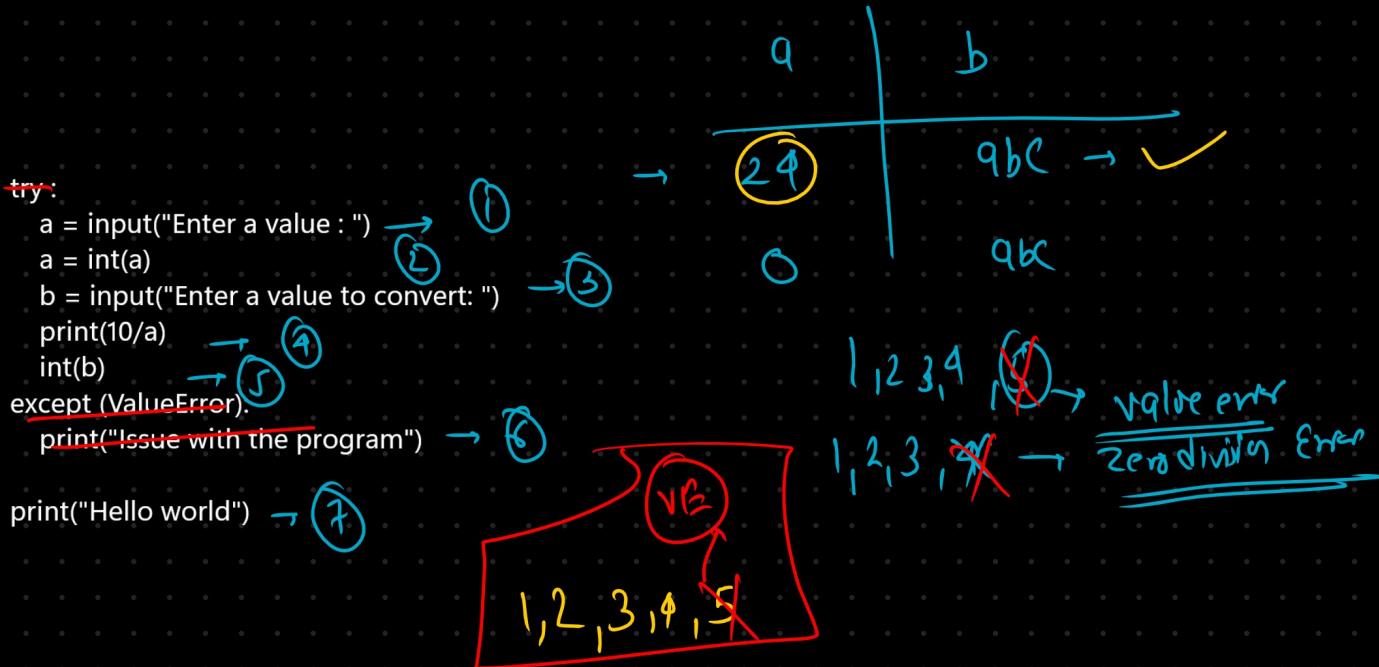
return c



$a = \text{add}(3, 4) \rightarrow \text{add}$
 $\text{print}(a) \rightarrow$

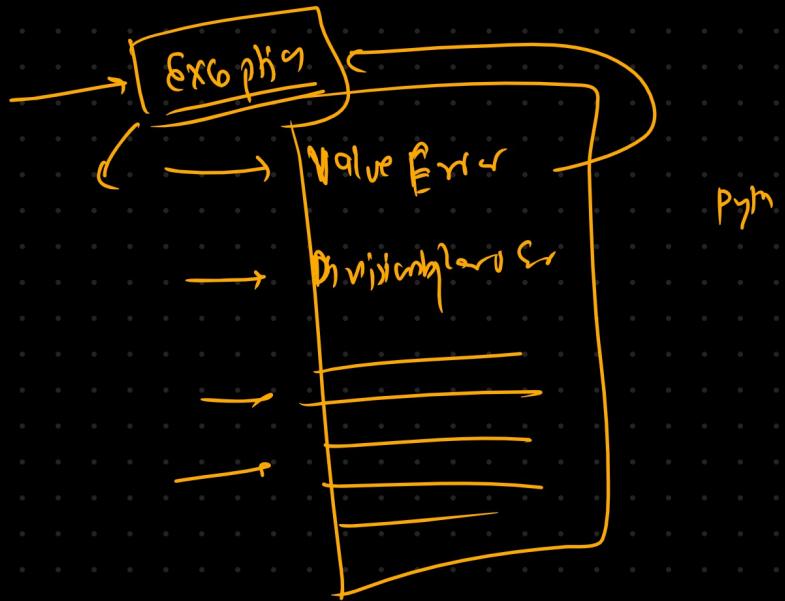


print("Hello world")



Q1/91





```

try :
    a = 0
    a = int(a)
    b = "abc"
    print(10/a)
    int(b)
# except (ValueError, ZeroDivisionError)
except Exception as e:
    print("We have encountered error : ", e) - error
print("Hello world")

```

Block
used to
handle
exception

→ try:

parent of all
exception

→ except Exception

```

# input by user
try:
    a = 0
    a = int(a)
    b = "1"
    print(10/a)
    int(b)
except Exception as e:
    print("We have encountered error : ", e)
finally:
    print("Input section executed successfully")

```

dry :
except :
finally

error ✓
 no error ✓
 → always
 → we don't do clean up → cleanup

dry!

f.open()

 read from .txt

except:

open

finally

f.close() →

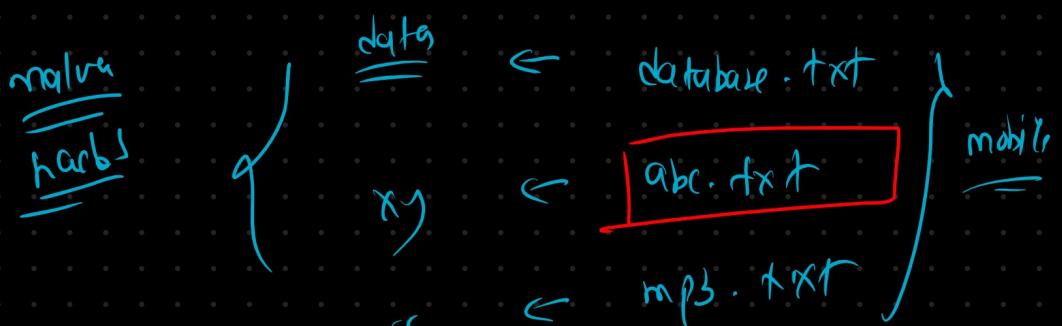
 cleanup & print

python always show → where is error

→ try & except

→ not break the code

. error .



static → $a = (\underline{\text{database.txt}}, \underline{\text{abc.txt}})$

→ try: for i in $a:$ file not found

$f = \text{open}(i)$

$f.readlines()$

→ except

no Yes full

load → no

exit

create L

try:
except:

→ try: [] → no error

except:

X → else: → runs only when there is
no error in try block

finally: → runs always

try =

except the exception →

(10/0) → 20E

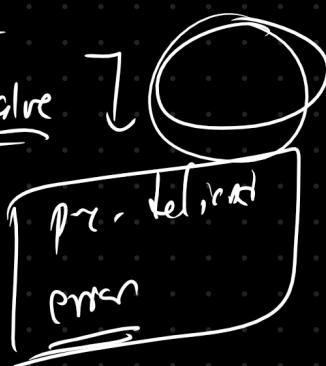
abc → int → value

Value error

can't

age < 0 or age > 100

age → too young



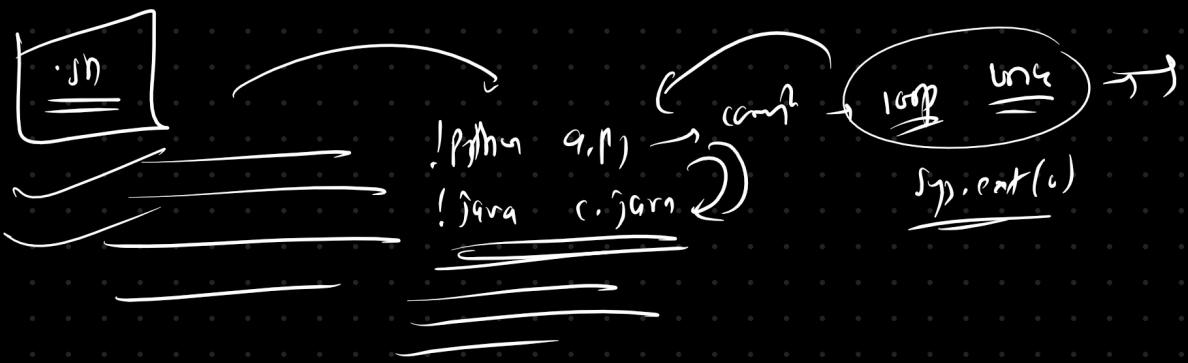
raise ValueError, "P"

[Python] → 2

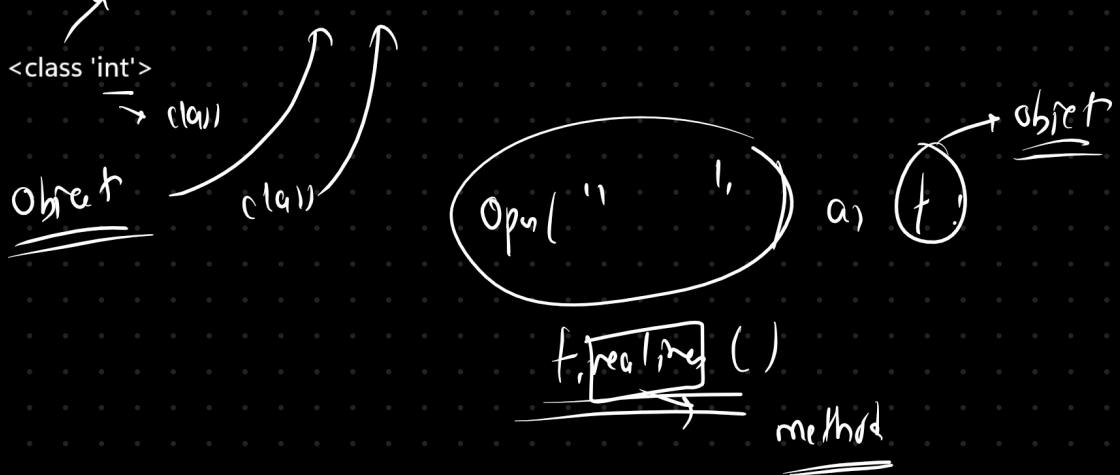
.py

Python3 → Python3
Python

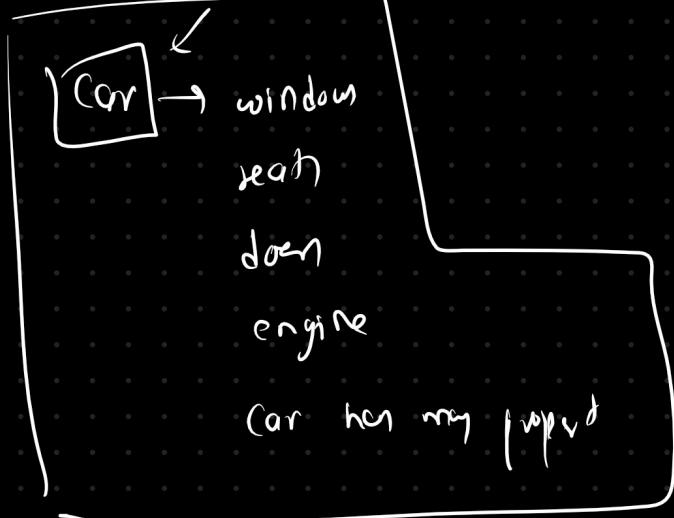
.ipynb notebook



OOP → object oriented programming



def add(): → standal



add()

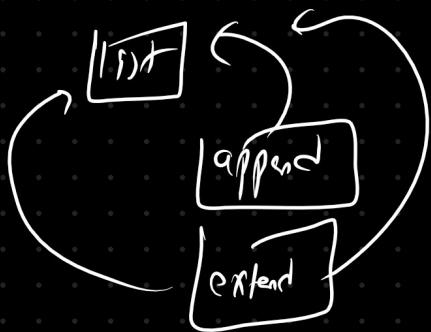


$a = 3$
 $a = "abc"$

$a = \underline{a}$ \downarrow \downarrow
 $\rightarrow \underline{\text{limit}}$?
 $\rightarrow \underline{\text{complex}}$

\downarrow
 $\boxed{\text{list}}.\text{append}()$ = $\boxed{2+}$ or $\boxed{1}$

$\text{list}.\text{extend}()$
 $\rightarrow \boxed{(\text{a})}$

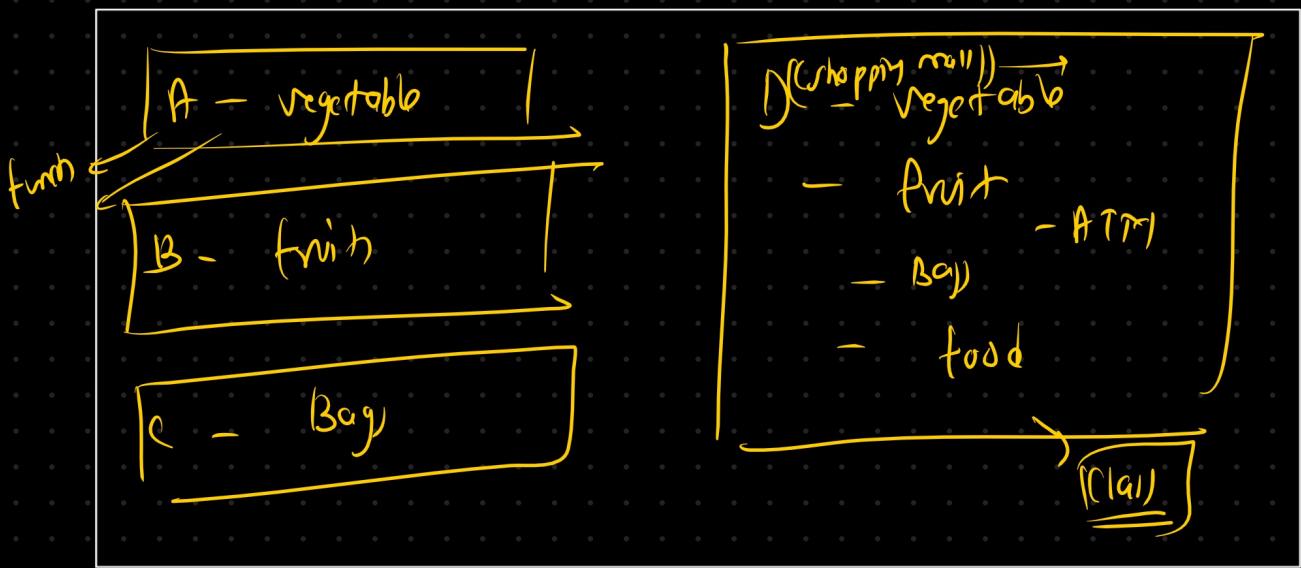


$c(\text{a}) \rightarrow \underline{\text{collection of function}}$

$\underline{\text{function}} \rightarrow \text{method}$

$\text{add}() \rightarrow \text{function}$

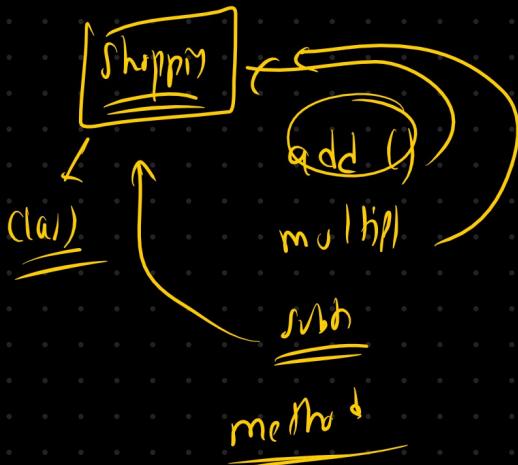
$\text{a.add}()$
 $\rightarrow \underline{\text{method}}$



def add ()

→ standard

↓
functions



Function inside a (class) is called a method