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Type checking & Type Conversion

lec. 12

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- Let's take an example

`print(len("Jenny"))` → will find out length of string
i.e. it will give 5.

So `len` is a function which accepts strings & if we write `print(len(123))` → it will give a TypeError
object of type 'int' has no 'len()'

but `print(len("123"))` → will print 3
[because 123 is a string in this case]

So
example:-

`length = len(input("What is your name?"))`
`print("Your name has " + length + " characters.")`

→ will give Type error as `length` is of integer type.

So here we have to do type conversion / type casting.

→ `print("Your name has " + str(length) + " characters.")`
→ output :- your name has 5 characters if I enter Jenny

`int()` → will convert into int
`float()` → will convert into float
`str()` → will convert into string

Coding exercise:- Take 2 numbers as input from the user & find out sum [use input function]

example 1: -

`print(10 + 10)` \rightarrow 20

`print("10" + "10")` \rightarrow 1010

`print(int("10") + int("10"))` \rightarrow 20

`print(10 + float("10.10"))` \rightarrow 20.10

example 2:

`a = 100`

`b = 12`

`print(str(a) + str(b))`

\Rightarrow prints 10012

example 3:-

`name = "Jenny"`

`print(10 + int(name))`

\Rightarrow value error

example 4: -

`name = "123"`

`new_name = int(name)`

`print(10 + new_name)`

\Rightarrow print 133