



## Exercise: Converting User Input

minae@PSYCHE MINGW64 ~/Desktop/NucampFolder/Python/1-Fundamentals

\$ python

Python 3.9.0 (tags/v3.9.0:9cf6752, Oct 5 2020, 15:34:40) [MSC v.1927 64 bit (AMD64)] on win32

Type "help", "copyright", "credits" or "license" for more information.

>>> year = 2021

>>> print("The year is " + year)

Traceback (most recent call last):

File "<stdin>", line 1, in <module>

TypeError: can only concatenate str (not "int") to str

>>>



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TypeError: can only concatenate str (not "int") to str

>>> year = "2021"

>>> print("The year is " + year)

The year is 2021

>>> █

# Type casting (type conversion)

Some other languages, such as JavaScript, perform automatic type conversion

Python does not, so you must convert types yourself

Built-in Function	Description
<code>str(arg)</code>	Argument passed in will be returned as String
<code>int(arg)</code>	Argument passed in will be returned as Integer Argument must contain a number
<code>float(arg)</code>	Argument passed in will be returned as Float Argument must contain a number

# Converting user input

The `input()` function always returns data from the user as String

## Example:

A bank account program asks a user for amount of cash to transfer

Program takes user input and tries to add it to a stored numeric value

Program crashes because input value is a string, and you can't add a string to a number



convert\_input.py ×

```
1 total_cash = 0
2 user_input = input("Enter amount to transfer: ")
3 total_cash = total_cash + float(user_input)
4 print("Total cash is now: ")
5 print(total_cash)
6
```

TERMINAL

OUTPUT

PROBLEMS

DEBUG CONSOLE

1: bash



```
minae@PSYCHE MINGW64 ~/Desktop/NucampFolder/Python/1-Fundamentals
$ python convert_input.py
Enter amount to transfer: 100000
Total cash is now:
100000.0
```

```
minae@PSYCHE MINGW64 ~/Desktop/NucampFolder/Python/1-Fundamentals
$
```