

...cont'd

- 1 Open an IDLE Edit Window and initialize two variables by assigning them numeric user input
`num1 = input('Please enter a whole number: ')`
`num2 = input('Now enter another whole number: ')`
- 2 Next, display the data type of each variable to see the numeric values are, in fact, stored as strings
`print('Input is: ' , type(num1) , type(num2))`
- 3 Now, use the + operator to attempt addition, but see the result gets concatenated as a **str** data type
`total = num1 + num2`
`print('Total:' , total , type(total))`
- 4 Again, use the + operator to attempt addition, but cast the stored values to see the result as an **int** data type
`total = int(num1) + int(num2)`
`print('Total:' , total , type(total))`
- 5 Finally, cast the stored values as a **float** data type and concatenate the **float** result value to the output **str** string
`total = float(num1) + float(num2)`
`print('Total:' , str(total) , type(total))`
- 6 Save then run the program to see the stored data types converted by casting them with the built-in functions



cast.py

```
Python Shell
File Edit Shell Debug Options Windows Help
>>> ===== RESTART =====
>>>
Please enter a whole number: 3
Now enter another whole number: 9
Input is: <class 'str'> <class 'str'>
Total: 39 <class 'str'>
Total: 12 <class 'int'>
Total: 12.0 <class 'float'>
>>> |
```



If you forget to convert to the correct data type the interpreter will report an error – try adding an **int** to a **str** data type to see the error message.