



# Education and More, LLC

WE PROVIDE SOLUTIONS TO EDUCATIONAL PROBLEMS

## Lesson 4a: Functions

A function is set of commands that takes an input (optional) and returns an output (optional). More about this later.

We will only look at `input()`, `int()` and `float()` today. More on this VERY important subject later on.

## Lesson 4b: Input

The input function takes data from the user and returns it. You will then do something with it. Usually you will assign it to a variable.

Example:

```
name=input("Please enter your name: ")
```

If you wanted an integer – for example you wanted a person's age then you will call another function `int()` like this:

```
age=int(input("Please enter your age: "))
```

If you wanted a float – for example you lived outside the USA and asked for their height (they would give it to you in meters) so you need to call another function `float()` like this:

```
height=float(input("Please enter your height: "))
```

## Homework for Lesson 4

Do the following using Python 3

Which functions do you think are **needed**: input(), int(), float() or none of them in the following...

- You say "Hello World!"
- You say "Hello , <username>" #where username was asked.
- You say "Hello John" every time you run it.
- You say "Hello beautiful, you lost",15 pounds this year. Where 15 was asked earlier.
- You say "Hello Tommy, you grew 3.5 inches this year." Where name of boy and number of inches was asked earlier.
- You say  $2.5+3.2=5.7$
- You take a string and print out

Give the commands you would use – along with variables names for the following:

- Getting the exact number of hours of typical flights to Florida from California.
- Getting the number of house of typical flights to Florida rounded to the nearest hour before you receive the answer.
- Get the name of the flight to Florida
- Getting the hour, the minutes and either am or pm as 3 separate requests when you want to know what time it is.
- Getting the city, state and integer zip code as 3 separate requests.