

Project #1: Your Biography

Let's create a python script to get reacquainted with ourselves. One way to do this is to ask some probing questions. Some questions that you may want to answer are things like:

- first name
- last name
- nationally
- birth place
- age
- height:
 - feet
 - inches
- weight (in pounds)
- favorite food
- favorite city

You can add on any additional questions you want. In order to create this script follow the steps:

1) In PyCharm go to the directory where you'll place all of your programs. Right-click on the directory and select: New → Python File. Enter the name of the python file as *bio.py*.

2) In the PyCharm editor add a function named `questions()`. Inside the function is where all of the statements for your logic to go inside. You can use the `input()` function to read in text from the terminal. If you need to read in an int or a float then you can pass the `input()` function into the `int()` or `float()` functions. For example, the following will read in a float from the terminal:

```
weight = float(input('Enter weight in lbs: '))
```

To view a list of the builtin functions in python3 check out this url:
<https://docs.python.org/3/library/functions.html>

3) Include the following code snippet after the questions() function:

```
if __name__ == '__main__':  
    # this is where your program starts  
    questions()
```

This lets the python interpreter know where to start at. In every python file there's a `__name__` variable that's set equal to `__main__`. Therefore, if your file explicitly includes this then it will tell the python interpreter to start here. Below is a template to how your python file will look:

```
def questions():  
    """This is the part of the program that prompts the user"""  
  
if __name__ == '__main__':  
    # this is the entry point to the program  
    questions()
```

One of the tricky things that you may want to look out for is how to read in multiple user input in a single statement. For example, reading in a single int or string is easy because you can do something like this:

```
>>> temperature = int(input('Temp today:'))
```

```
Temp today:75
```

```
>>> color = input('The color:')
```

```
The color:blue
```

However, what if you want the user to enter in two inputs so that you can store the data in feet and inches? One way to do that is to use the builtin string method called `split()`. What this does is split the text around a certain character like a comma.

Skills needed to complete exercise

Need to know about python strings, how to create functions, how to read user input, how to use some of the built in functions in python, and how to how an IDE or text editor. Like when creating many programs, it's nice to have debugging and testing skills. Also, the ability to research the web and find timely answers to problems you have is also important.

Sample Solution:

Below is a sample solution. Your script may have more or less questions, it really depends on how you want to create it.

```
def questions():
    """This is the part of the program that prompts the user
    for a bunch of questions."""
    first_name = input('Enter your first name: ').capitalize()
    last_name = input('Enter your last name: ').capitalize()
    nationality = input('Enter your nationality: ').capitalize()
    age = int(input('Enter your age: '))
    height = input('Enter feet and inches separated by commas: ')
    user_input = height.split(',')
    heights = user_input[0], user_input[1]
    weight = float(input('Enter weight in lbs: '))
    favorite_food = input('Enter your favorite food: ').capitalize()
    favorite_city = input('Enter in your favorite city: ').capitalize()
    print()

    print('First name: {}'.format(first_name))
    print('Last name: {}'.format(last_name))
```

```
print('Nationality: {}'.format(nationality))
print('Age: {}'.format(age))
print('Height: {} ft {} in'.format(user_input[0], user_input[1]))
print('Weight: {}'.format(weight))
print('Favorite food: {}'.format(favorite_food))
print('Favorite city: {}'.format(favorite_city))

if __name__ == '__main__':
    # this is where your program starts
    questions()
```

Sample input:

Enter your first name: danny

Enter your last name: hill

Enter your nationality: american

Enter your age: 47

Enter feet and inches separated by commas: 5, 5

Enter weight in lbs: 200

Enter your favorite food: pizza

Enter in your favorite city: philadelphia

Sample output:

First name: Danny

Last name: Hill

Nationality: American

Age: 47

Height: 5 ft 5 in

Weight: 200.0

Favorite food: Pizza

Favorite city: Philadelphia

Note, you can run the file by opening up the terminal or commands prompt, and typing the following:

```
python bio.py
```