

MTH 2220
Assignment #4
Due: March 24, 2016

Write a PYTHON program:
(See p. 3 of the PYTHON Command Syllabus: “Creating a PYTHON Program”)

Save the program under the name: *firstnamelastname_assn4.py*

Create a user-defined function named *square*. The function should have one parameter. (You can name this parameter *x* or you can call it something else.)

Your function should fit the form:

```
def <function name> (parameters):  
    <body>  
    <body>  
    <body>  
    return <value to be returned>
```

The function should take the value of the parameter, square that value, and return that value (the square of the value of the parameter) to the main program.

Save the program

Immediately after saving the program, write the template of your “main” program (as described on p. 2 of the PYTHON Command Syllabus “Template of a PYTHON Program”) and save the program again. This should insure that you get the indentation correct. (The entire body of the program (between “def main ():” and “main ()”) should be indented with respect to “def main ():” and “main ()”)

Your template might look like this:

```
def main ():  
    # This is <your name>'s program  
  
main()
```

Remark: If the indentation is not correct, your program will have syntax errors when you try to run it.

1. Write an input statement to prompt the user to enter a real number *x* between -10.0 and 10.0.
2. Write a print statement of the form:

```
print(“the value of ”, x, “ squared is ”, square(x))
```

This is the WHOLE program!

The purpose of this program is to give us experience *creating* user-defined functions, and *using* user-defined functions.