

Python class 7 Homework

1. Define a function to calculate the result of: $a^2 + b^2$, and print out the result of $(11^2 + 13^2)$
2. Define a function to calculate the area of a radius, and define another function to calculate the circumference of a radius. Use global constant variable. Then print the results of the circle area and circumference of radius of 5.

```
PI = 3.14159265358979    # global constant
def circleArea(radius):
    """This function returns the circle area of the given radius"""
    # TODO: complete this function

def circleCircumference(radius):
    """This function returns the circle circumference of the given
    radius"""

    # TODO: complete this function

    # TODO: call the above two functions to calculate the circle area and
    circumference of radius of 5.
```

3. Define a function to return the absolute value of a number. E.g., if input is 2, return 2; if input is -4, return 4. If input is 0, return 0.

```
def absolute_value(num):
    """This function returns the absolute value of the entered number"""

    # TODO: complete this function

    # TODO: call the above function to get the absolute value of
    number:10.34, -909, 123, -765.23
```

4. Print out the ASCII value of character 'G', and convert it to lower case character 'g'
5. Given a price for different fruits, write a function to calculate the total price of buying 6 apples, 2 bananas, 3 pears, 1 watermelon, 4 mangos.

```
prices = {'apple': 2.00, 'banana': 1.00, 'pear': 1.50, 'watermelon':
4.50, 'mango': 2.50}

#TODO: complete below function, including the parameters. Return the
total price of the whole purchase
```

```
def total_price():  
    """This function returns the total price of the fruits you buy"""  
  
    #TODO: call totao_price function, and print out the total price of  
    buying 6 apples, 2 bananas, 3 pears, 1 watermelon, 4 mangos.
```