Lab 6 - functions, again

You will write and test a series of functions that return values.
Your main program will contain a series of function definitions, and a main loop that asks for user input that is then used to call your functions.

Define these (or similar) functions

get_ok()
```
# no input parameter, returns 'y' or 'n', used to control a while loop
```

circle_area(radius)
```
# returns the area of the circle (pi * r * r)
```

cylinder_volume(radius, height)
```
# given radius of the circle and the height, returns volume of the cylinder.
```

get_float(prompt_message)
```
# displays prompt_message in an input function, returns response as float
```

float_money(amount)
```
# uses format function to convert amount to a string showing the value of amount,
# Example x = float_money(34567.2) returns '34,567.20'
```

square(number)
```
# returns the square of number (number * number, or number ** 2)----------------------
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# Sample definitions for functions

def get_ok():
    ''' () -> str
        returns 'y' or 'n' typed in by user
    ok = input("Do again ? Press y or n ")
    ok = ok.lower() # make lowercase
    if len(ok) > 1:
        ok = ok[0]  # get 1 char. only
    # end if
    return ok

def square(x):
    ''' (float) -> float
        returns square of x
    '''
    return x * x

def circle_area(radius):
    ''' (float) -> float
        returns area of circle
    '''
    pi = 3.141592
    area = pi * square(radius)
    return area
```

```
def float_money(amount):
    ''' (float) -> str
        returns string of amount with commas
        and 2 decimal places

       >>>float_money(81234.5)
        81,234.50
    '''
    dollars_string = format(amount, ',.2f')
    return dollars_string

# any other function defs...

# main program

ok = 'y'
while ok == 'y':
    my_radius = get_float("Enter radius of circle ")
    area = circle_area(my_radius)
    print("Area of circle", area, "Radius", my_radius)
    print()

    my_height = get_float("Enter height of cylinder ")
    vol = cylinder_volume(my_radius, my_height)
    print("Volume of cylinder", vol)

    home_price = get_float("Enter home price ")
    display_price = float_money(home_price)
    print("Home for sale, price is", display_price)

    # additional function calls go in here...

    ok = get_ok()  # update ok
# end while
```

Grading

10	Main loop to test various functions
5	Each function coded and tested successfully (6 functions would earn 30)
40	Main and 6 functions

If you write and use extra functions, you will earn etra points.