

**Name: Sheryar Sher**

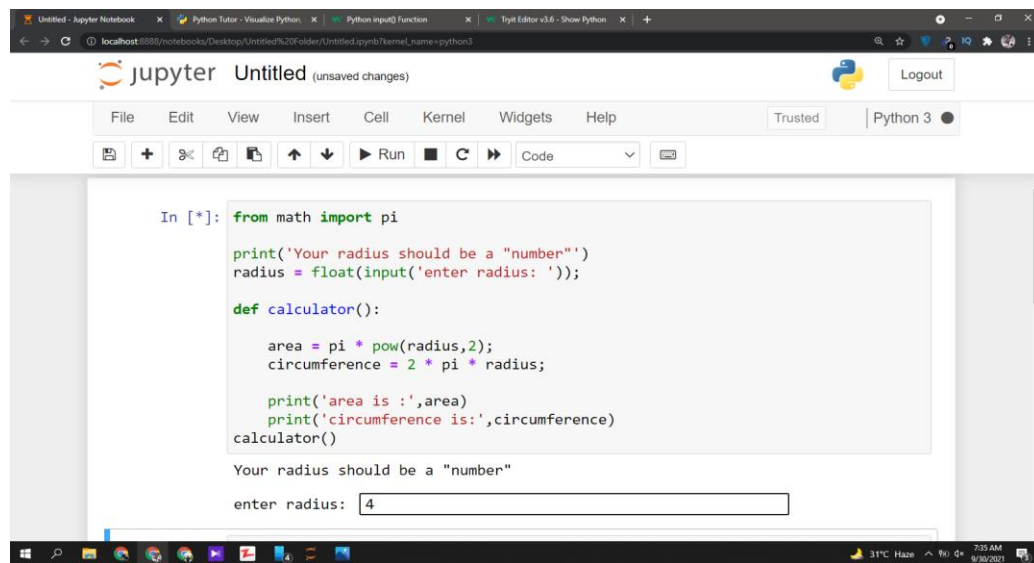
**Roll#: 21P-8027**

**Program: BS(CS)**

**Lecturer: Maryam Omar**

1. take radius as an input from user and calculate area and circumference of a circle.

**CODE:**



The screenshot shows a Jupyter Notebook interface with a code cell containing the following Python code:

```
In [*]: from math import pi

print('Your radius should be a "number"')
radius = float(input('enter radius: '));

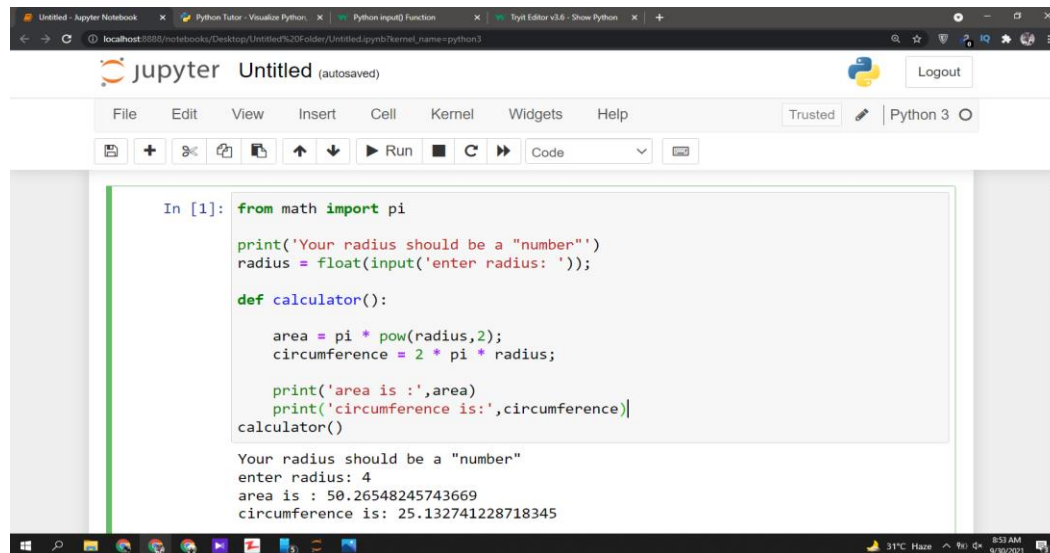
def calculator():
    area = pi * pow(radius,2);
    circumference = 2 * pi * radius;

    print('area is :',area)
    print('circumference is:',circumference)
    calculator()

Your radius should be a "number"
enter radius: 4
```

The input field for 'enter radius:' contains the value '4'.

**OUTPUT:**



The screenshot shows the same Jupyter Notebook interface, but the code cell is now executed, and the output is displayed below the code:

```
In [1]: from math import pi

print('Your radius should be a "number"')
radius = float(input('enter radius: '));

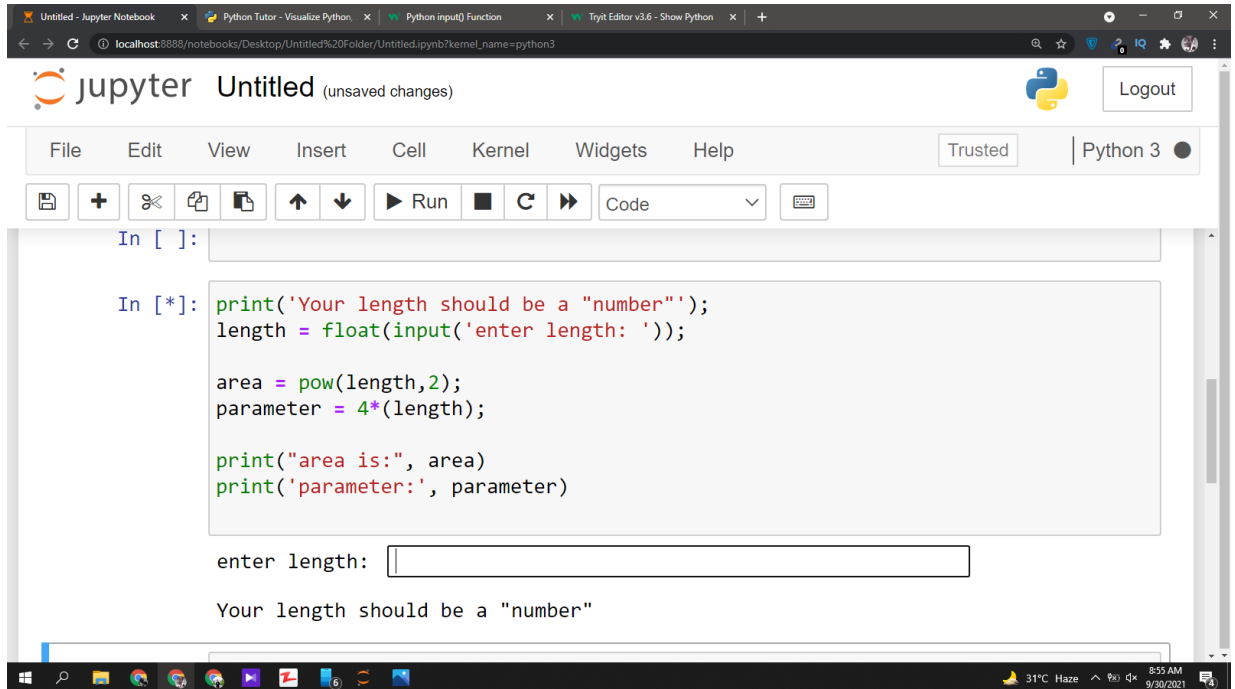
def calculator():
    area = pi * pow(radius,2);
    circumference = 2 * pi * radius;

    print('area is :',area)
    print('circumference is:',circumference)
    calculator()

Your radius should be a "number"
enter radius: 4
area is : 50.26548245743669
circumference is: 25.132741228718345
```

2. take length of a square as an input from user and calculate its area and parameter.

### CODE:



The screenshot shows a Jupyter Notebook interface with a single code cell. The code prompts the user to enter a length, calculates the area and perimeter, and prints the results. The notebook is titled 'Untitled (unsaved changes)' and is running on Python 3. The status bar indicates the notebook is 'Trusted'.

```
In [*]: print('Your length should be a "number"');
length = float(input('enter length: '));

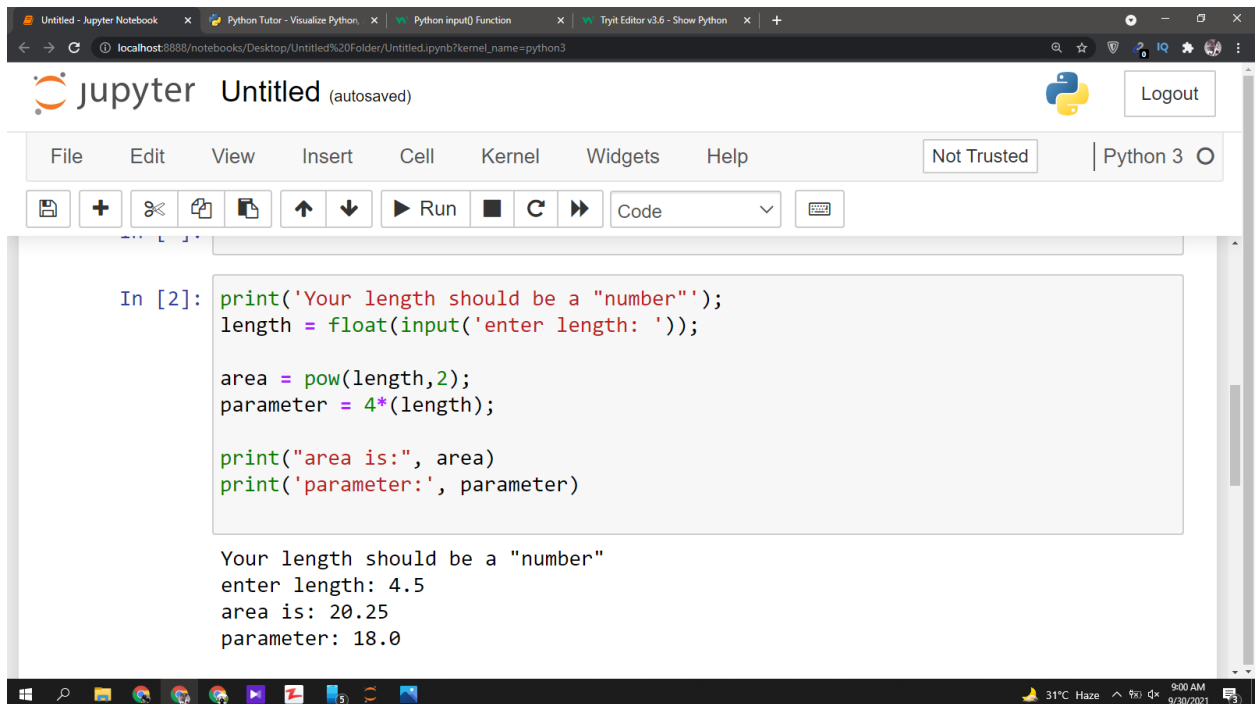
area = pow(length,2);
parameter = 4*(length);

print("area is:", area)
print('parameter:', parameter)
```

enter length:

Your length should be a "number"

### OUTOUT:



The screenshot shows the same Jupyter Notebook interface, but now the code has been executed. The output displays the prompts and the calculated values for area and perimeter. The notebook is now titled 'Untitled (autosaved)' and the status bar indicates it is 'Not Trusted'.

```
In [2]: print('Your length should be a "number"');
length = float(input('enter length: '));

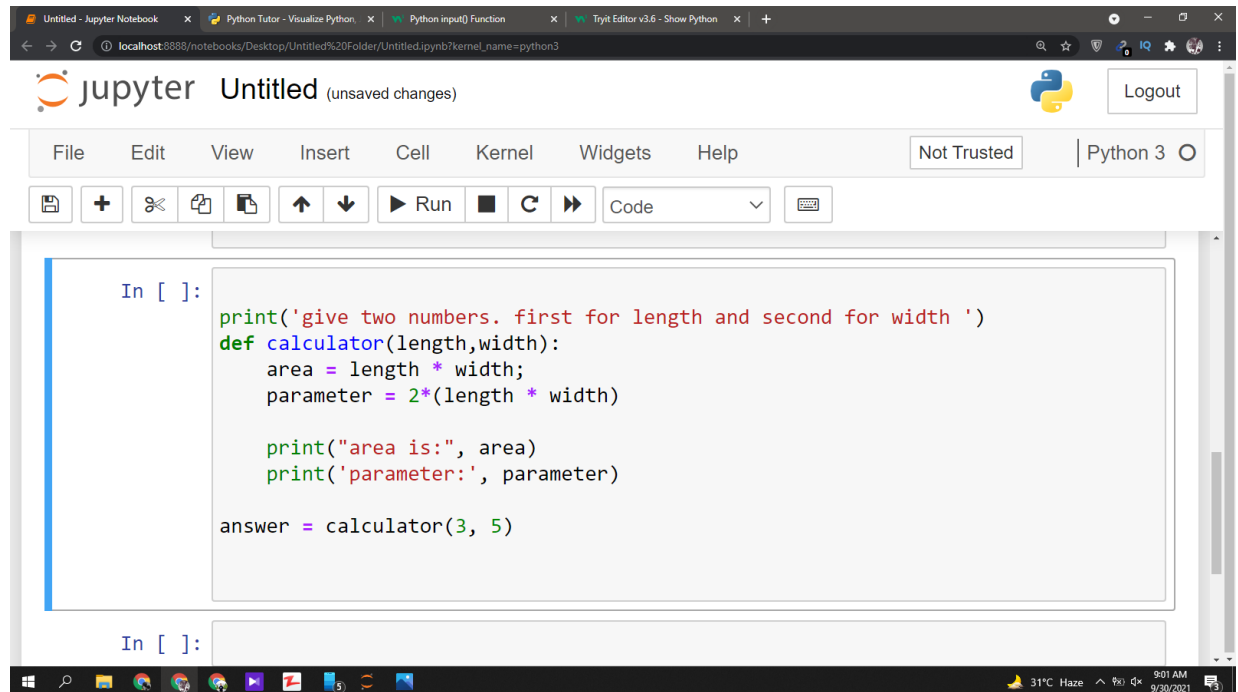
area = pow(length,2);
parameter = 4*(length);

print("area is:", area)
print('parameter:', parameter)
```

Your length should be a "number"  
enter length: 4.5  
area is: 20.25  
parameter: 18.0

3. take length and width of a rectangle as an input from user and calculate its area and parameter.

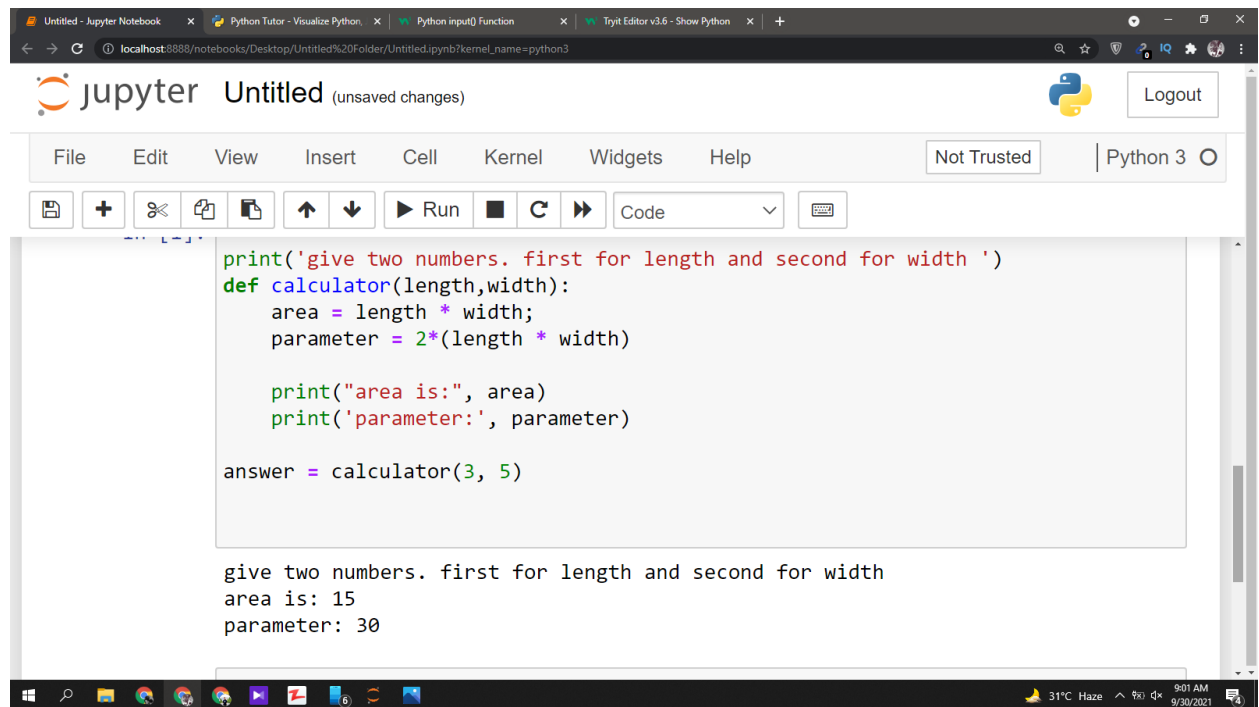
#### CODE:



The screenshot shows a Jupyter Notebook window titled 'Untitled (unsaved changes)' with a Python 3 kernel. The code in the cell is as follows:

```
In [ ]:  
print('give two numbers. first for length and second for width ')  
def calculator(length,width):  
    area = length * width;  
    parameter = 2*(length * width)  
  
    print("area is:", area)  
    print('parameter:', parameter)  
  
answer = calculator(3, 5)
```

#### OUTPUT:



The screenshot shows the same Jupyter Notebook after execution. The output of the code is displayed below the cell:

```
give two numbers. first for length and second for width  
area is: 15  
parameter: 30
```