Lab Task : 1

Create a Python class called Rectangle with the following attributes:

1. width (float): representing the width of the rectangle.
2. height (float): representing the height of the rectangle.

Implement the following methods for the Rectangle class:

1. __init__(self, width, height): Constructor method to initialize the attributes of the rectangle object.
2. __str__(self): Method to return a string representation of the rectangle object in the format "Rectangle: [width] x [height]".
3. area(self): Method to calculate and return the area of the rectangle (width * height).
4. perimeter(self): Method to calculate and return the perimeter of the rectangle (2 * (width + height)).

Create an instance of the Rectangle class, initialize its attributes with user input for width and height, and perform the following operations:

1. Display the rectangle details using the __str__ method.
2. Calculate and display the area of the rectangle using the area method.
3. Calculate and display the perimeter of the rectangle using the perimeter Method

Answer:

```
class rectangle:
    def __init__ (self,width,height):
        self.width=width
        self.height=height
    def __str__(self):
        return f"Rectangle:{self.width} * {self.height}"
    def area(self):
        return self.width*self.height
    def perimeter(self):
        return 2*(self.width * self.height)
width=float(input("Enter the width of the rectangle: "))
height=float (input("Enter the height of rectangle: "))
rectangle=Rectangle(width,height)
print(rectangle)
print("Area of the rectangle : " , rectangle.area())
print("perimeter of the rectangle : " , rectangle.perimeter())
```