

```
#Create a Time class with hours and minutes.
#Overload the + operator to add two Time objects correctly.
class Time:
    def __init__(self, hours=0, minutes=0):
        self.hours = hours
        self.minutes = minutes

    def __str__(self):
        return f"{self.hours} hours and {self.minutes} minutes"

    def __add__(self, other):
        total_minutes = self.minutes + other.minutes
        total_hours = self.hours + other.hours + total_minutes // 60
        total_minutes %= 60
        return Time(total_hours, total_minutes)

# Test the classes
time1 = Time(2, 30)
time2 = Time(1, 45)
print("Time 1:", time1)
print("Time 2:", time2)
print("Time 1 + Time 2:", time1 + time2)
```

```
Time 1: 2 hours and 30 minutes
Time 2: 1 hours and 45 minutes
Time 1 + Time 2: 4 hours and 15 minutes
```

```
#Create a Distance class with attributes feet and inches.
#Overload the * operator to multiply the distance by a scalar value.(any numeric value
```

```
class Distance:
    def __init__(self, feet=0, inches=0):
        self.feet = feet
        self.inches = inches

    def __str__(self):
        return f"{self.feet} feet and {self.inches} inches"

    def __mul__(self, scalar):
        total_inches = (self.feet * 12 + self.inches) * scalar
        total_feet = total_inches // 12
        total_inches %= 12
        return Distance(total_feet, total_inches)
```

```
distance1 = Distance(5, 6)
print("\nDistance 1:", distance1)
print("Distance 1 * 2:", distance1 * 2)
```

```
Distance 1: 5 feet and 6 inches
Distance 1 * 2: 11 feet and 0 inches
```

```
#Create a Rectangle class with length and width.
#Overload the == operator to compare the area of two rectangles.
```

```
class Rectangle:
    def __init__(self, length=0, width=0):
        self.length = length
        self.width = width

    def __str__(self):
        return f"Rectangle with length {self.length} and width {self.width}"

    def __eq__(self, other):
        return self.length * self.width == other.length * other.width
```

```
rectangle1 = Rectangle(4, 5)
rectangle2 = Rectangle(5, 4)
print("\nRectangle 1:", rectangle1)
print("Rectangle 2:", rectangle2)
print("Rectangle 1 == Rectangle 2:", rectangle1==rectangle2)
```

```
Rectangle 1: Rectangle with length 4 and width 5
Rectangle 2: Rectangle with length 5 and width 4
Rectangle 1 == Rectangle 2: True
```