lab13 q1.py | lab13 q2.py | lab13 q3.py | lab13 q4.py

```python
class point:
    def __init__(self,x,y):
        self.x = int(input("Enter X :"))
        self.y = int(input("Enter Y : "))
    def __add__(self, p2):
        return f"{self.x + p2.x},{self.y + p2.y}"
p1 = point(2,4)
p2 = point(2,4)
print(p1+p2)
```

lab13 q1

```
"C:\Program Files\Python310\python.exe" "C:/Users/HAFIZ COMPUTER/Desktop/HASNAIN/OOP/oop lab13/lab13 q1.py"
Enter X :2
Enter Y : 3
Enter X :4
Enter Y : 5
6,8
```

lab13 q1.py | lab13 q2.py | lab13 q3.py | lab13 q4.py

```python
class point:
    def __init__(self,x,y):
        self.x = int(input("Enter X :"))
        self.y = int(input("Enter Y : "))
    def __add__(self, p2):
        return f"{self.x + p2.x},{self.y + p2.y}"
    def __lt__(self,p2):
        a = self.x < p2.x
        b = self.y < p2.y
        if a and b:
            return "P1 is smaller than P2"
        else:
            return "P2 is smaller than P1"
    def __gt__(self, p2):
        a = self.x > p2.x
        b = self.y > p2.y
        if a and b:
            return "P1 is greater than P2"
        else:
            return "P2 is greater than P1"
p1 = point(2,4)
```

point › __init__()

lab13 q2

```
Enter X :2
Enter Y : 3
Enter X :5
Enter Y : 6
7,9
P1 is smaller than P2
P2 is greater than P1
```

lab13 q1.py | lab13 q2.py | lab13 q3.py | lab13 q4.py

```python
class Circle:
    def __init__(self,r):
        self.r = int(input("Enter radius :"))
    def __lt__(self,c2):
        a = self.r < c2
        if a:
            return "C1 is smaller than C2"
        else:
            return "C2 is smaller than C1"
    def __gt__(self, c2):
        a = c2 > self.r
        if a:
            return "C2 is greater than C1"
        else:
            return "C1 is greater than C2"
c1 = Circle(2)
c2 = Circle(4)
print(c1.__lt__(c2))
print(c1.__gt__(c2))
```

Circle › __lt__() › if a

lab13 q3

```
"C:\Program Files\Python310\python.exe" "C:/Users/HAFIZ COMPUTER/Desktop/HASNAIN/OOP/oop lab13/lab13 q3.py"
Enter radius :22
Enter radius :34
C1 is smaller than C2
C2 is greater than C1
```

lab13 q1.py | lab13 q2.py | lab13 q3.py | lab13 q4.py

```python
class point:
    def __init__(self,x,y):
        self.x = int(input("Enter X :"))
        self.y = int(input("Enter Y : "))
    def __add__(self, p2):
        return f"{self.x + p2.x},{self.y + p2.y}"
    def __lt__(self,p2):
        a = self.x < p2.x
        b = self.y < p2.y
        if a and b:
            return "True. P1 is smaller than P2"
        else:
            return "False P1 is not smaller than P2"
    def __gt__(self, p2):
        a = self.x > p2.x
        b = self.y > p2.y
        if a and b:
            return "True. P1 is greater than P2"
        else:
            return "False. P1 is not greater than P2"
p1 = point(2,4)
```

point › __lt__() › if a and b

lab13 q4

```
Enter X :33
Enter Y : 45
Enter X :67
Enter Y : 89
100,134
True. P1 is smaller than P2
False. P1 is not greater than P2
```