-: Practical Set – 9 :-

1. Write a Python program to create class KSV with attributes like class variable cnt, instance variables x and y, instance methods get_value and print_value.

```
class KSV:
    cnt = 0
    def __init__(self, x, y):
        self.x = x
        self.y = y
        KSV.cnt += 1
    def get_value(self):
        return self.x, self.y
    def print_value(self):
        print("x:", self.x)
        print("y:", self.y)

std1 = KSV(10, 5)
std2 = KSV(4, 8)
print(f"Total students : {std1.cnt} {std2.cnt} {KSV.cnt}")
```

OUTPUT :

```
Total students : 2 2 2
```

2. Write a python program to demonstrate overloading of add (+) operator.

```
class Number:
    def __init__(self, value):
        self.value = value
    def __add__(self, other):
        if isinstance(other, Number):
            return Number(self.value + other.value)
        elif isinstance(other, int) or isinstance(other, float):
            return Number(self.value + other)
        else:
            raise TypeError("Unsupported operand type(s) for +: '{}' and
'{}'".format(type(self).__name__, type(other).__name__))
    def __str__(self):
        return str(self.value)

n1 = Number(10)
n2 = Number(20)
n3 = n1 + n2
n4 = n1 + 5
print(n3)
print(n4)
```

OUTPUT :

```
30
15
```