Practical Set – 6

Program 6.1: Create class vgec with following attributes
a. Class variable cnt
b. Instance variables x, y
c. Instance methods get_value, print_value
d. Parameterized constructor, destructor

Code:
```
class vgec:

    cnt=0 #class variable

    def __init__(self):
        print("....this is parametrized constructor...")

    def get_value(self):
        self.x=input("\nEnter the value of x :") # instance variable
        self.y=input("Enter the value of y :")

    def print_value(self):
        print("value of X:",self.x)
        print("value of Y:",self.y)
o1=vgec()
o1.get_value()
o1.print_value()
```

Output:
Enter the value of x :20
Enter the value of y :30
value of X: 20
value of Y: 30

Program 6.2: Implement the concept of class method, static method and instance method.

Code:

```
class Myclass:

    name="Aadi"
    def __init__(self,a,b):
        self.a=a
        self.b=b

    def disp(self):
        print("Output return by instance method")
        print("a :",self.a)
        print("b :",self.b)

    @classmethod
    def cmethod(cls):
        print("Output return by class method :",cls.name)

    @staticmethod
    def smethod():
        print("This is static method ")


s1=Myclass(10,20)
s1.disp()
Myclass.cmethod()
Myclass.smethod()
```

Output:
Output return by instance method
a : 10
b : 20
Output return by class method : Aadi
This is static method

Program 6.3: Create a class Book wtih attributes (Title, Author, No_of_Pages). Override inbuilt methods
__str__(), __len__(), __del() so that it displays customized messages.
For Ex. len(Book) will return No_of_Pages

Code:
```python
class Book:
  def __init__(self,title,author,page):
    self.title=title
    self.author=author
    self.page=page

  def __str__(self):
    return "\nTitle :"+self.title+"\nAuthor:"+self.author+"\nPages:"+str(self.page)

  def __len__(self):
    return self.page

  def __del__(self):
    del self.title
    del self.author
    del self.page
    print("Book entry deleted")
#main
o1=Book("You Can Win","Shiv khera",250)
print('Book:',o1)
print('length of the book:', len(o1))
del o1
```

Output:
Book:

Title :You Can Win

Author:Shiv khera

Pages:250

length of the book: 250

Book entry deleted