

## OOPs assignment-2 on Constructor, Destructor, Passing and Returning Objects.

Q1) Create a class student. It should have three variables rollnum, marks1, marks2. It should have three functions, set(), get() , add(). Tasks :

- 1) create two objects.
- 2) Assign values to variables of these objects.
- 3) Print values of these variables
- 4) Add marks of these two objects. Upload complete running code with function definitions.

Q2) In the above class add a Parameterized constructor and a destructor. Tasks :

- 1) create a local block in main. You can use this

```
if(1)
```

```
{
```

```
    //Inside a local block
```

```
}
```

- 2) create three objects. One before the local block, second inside the local block and third outside the local block

- 3) Assign values using constructor. You can't use set() function.

- 4) print values of variables of each object

- 5) Add values Output should be in following form:

constructor called

1

20

30

50

consturctor called

2

90

60

150

destructor called

constructor called

3

100

100

200

destructor called

destructor called

Q3) WAP to show the use of object passing. Use the student class from previous question. Create a function max that will take object as parameters. Task:

1) Create two objects.

2) Assign values.

- 3) Call a function to print the rollnum of student with more marks (sum of m1 and m2). This function should take only one object as parameter. For eg: obj1.max(obj2)
- 3) This function should not return any object.

Q4) WAP to show the use of returning objects. Use the student class from above as example. Create a function named copydetails() that will copy the rollnum, m1, m2 of one student to another. This function should take one object as parameter and should return an object. For eg. Obj1.copydetails(obj2) . This function should return an object which will contain sum of marks of obj1 and obj2. Finally assign that returning object details to obj2.

Task:

- 1) create two objects.
- 2) assign values to obj1 and obj2.
- 3) Call copydetails using obj1 and pass obj2 as parameter.
- 4) Copydetails will add marks of obj1 and obj2 and return an object.
- 5) The values of returned object should be copied to obj2.
- 6) print new values of obj2.