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3rd year CSE Roll – 48

Static Lab

1)

```
class student{

   String name;

   int s_id;

   static String college_name = "STCET";

   student(String name, int s_id){

     this.name = name;

     this.s_id = s_id;

   }

   static void show(){

     System.out.println("College : "+college_name);

   }

   static void display(){

     System.out.println("Name : "+this.name);

     System.out.println("Student ID: "+this.s_id);

   }

}
public class problem1{

   public static void main(String args[]){

     student s1=new student("Joseph Johnson",45);

     System.out.println("Calling by Object name:\n ");

     s1.show();
```

```java
        s1.display();

        student s2=new student("Rajat Biswas",29);

        System.out.println("\nCalling by Class name:\n ");

        student.show();

        s2.display();

        student s3=new student("Hrisik Das",85);

        student.college_name = "IIEST";

        System.out.println("\nCollege name changed to: "+student.college_name);

        s3.show();

        s3.display();

        System.out.println("\nNow all the students study is:\n ");

        System.out.println(s1.name+" "+s1.college_name);

        System.out.println(s2.name+" "+s2.college_name);

        System.out.println(s3.name+" "+s3.college_name);

    }

}
```

Output 1:

```
Calling by Object name:

College : STCET
Name : Joseph Johnson
Student ID: 45

Calling by Class name:

College : STCET
Name : Rajat Biswas
Student ID: 29

College name changed to: IIEST
College : IIEST
Name : Hrisik Das
Student ID: 85

Now all the students study is:

Joseph Johnson IIEST
Rajat Biswas IIEST
Hrisik Das IIEST
```

Output 2:

```
problem1.java:15: error: non-static variable this cannot be referenced from a static context
        System.out.println("Name : "+this.name);
                                      ^
problem1.java:16: error: non-static variable this cannot be referenced from a static context
        System.out.println("Student ID: "+this.s_id);
                                           ^
2 errors
```

2)

```java
public class problem_2{

        public static void main(String[] args) {

                System.out.println("Main method called later");

        }

        static{

                System.out.println("Static method called first");

        }
```

}

Output :

```
Static method called first
Main method called later
```

3)

```
public class counter{

        static int count = 0;

        counter(){

                count ++;

        }

        void display(){

                System.out.println("Number of object creation : "+count);

        }

        public static void main(String args[]) {

                counter c1 = new counter();

                c1.display();

        counter c2 = new counter();

                c2.display();

                counter c3 = new counter();

                c3.display();

        }

}
```

Output :

```
Number of object creation : 1
Number of object creation : 2
Number of object creation : 3
```