

Question 1 [7 Points]

```

1 public class MQuiz {
2     public static int var = 6;
3     protected int x, y = 2;
4     public MQuiz(){
5         x += var - y;
6         var += 2;
7     }
8     public void metA(int x, int temp){
9         y = temp;
10        temp = this.y + x;
11        this.x += ++x - temp;
12        System.out.println(x + " " + y + " " + temp);
13    }
14 }
15 class TQuiz extends MQuiz{
16     public static int y = 2;
17     public int var = 6, temp = 3;
18     public TQuiz(){
19         y += 2;
20         var = super.x + y;
21         x = (temp++) + var;
22         metA(x, temp);
23     }
24     public void metB(int x, int y){
25         this.y += y;
26         x = this.x + x;
27         metA(x, temp);
28         var = TQuiz.y + MQuiz.var;
29         System.out.println(this.x + " " + this.y + " " + this.var);
30     }
31 }

```

Illustrate the output of the following statements written in the main method of a tester class. [Answers without workings on the script will be rejected]:

Driver code:

```
TQuiz t1 = new TQuiz();
t1.metB(2, 4);
```

Output:

	4	
11		

Question 2 [8 Points]

Implement the **Team** class derived from TechCompany class so that it generates the given output.

```
//PARENT CLASS
public class TechCompany {
    static int total_devices = 52;
    protected String name;
    public TechCompany(String name) {
        this.name = name;
    }
    public String toString() {
        return "Name: " + name + ", Total Devices: " + total_devices;
    }
}
```

DRIVER CODE	OUTPUT
<pre>class TechTester { public static void main(String[] args) { Team dev = new Team("Dev", "LMS"); Team qa = new Team("QA", "Bug Report"); System.out.println("=====1====="); System.out.println(dev); System.out.println("=====2====="); dev.allocateDevices(20); qa.allocateDevices(15); System.out.println("=====3====="); dev.addProject("Website Upgrade"); dev.addProject("Step Counter"); System.out.println("=====4====="); dev.addProject("E-Comm"); System.out.println("=====5====="); qa.allocateDevices(20); System.out.println("=====6====="); System.out.println(dev); System.out.println(qa); } }</pre>	<pre>=====1===== Name: Dev, Total Devices: 52 Devices Allocated: 0 Projects: LMS =====2===== 20 devices allocated to team Dev 15 devices allocated to team QA =====3===== =====4===== Cannot add more projects. =====5===== Not enough devices. =====6===== Name: Dev, Total Devices: 17 Devices Allocated: 20 Projects: LMS, Website Upgrade, Step Counter Name: QA, Total Devices: 17 Devices Allocated: 15 Projects: Bug Report</pre>