**SAT 13/4/13 CSE110 Sec \_\_\_ ID \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Name(CAPITAL) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Find output of all both of the programs below.**

**Quiz 6)**

**import static java.lang.System.out;**

**class Hard {**

**int sum (int x, int y) {**

**out.println(y+" "+x);**

**x -= 2;**

**y -= 3;**

**out.println(y+" "+x);**

**return x-y;**

**}**

**int product (int y, int x) {**

**out.println(y+" "+x);**

**x += 10;**

**y += 20;**

**out.println(x+" "+y);**

**return x+y;**

**}**

**int difference (int y) {**

**out.println(x+" "+y);**

**return y-x;**

**}**

**int x, y;**

**}**

**import static java.lang.System.out;**

**class HardTester {**

**public static void main (String[] args) {**

**Hard h = new Hard();**

**int x = 5, y = 10;**

**x += h.sum(y, x);**

**out.println(y+" "+x);**

**y += h.product(y, x);**

**out.println(y+" "+x);**

**x -= h.difference(x);**

**out.println(y+" "+x);**

**}**

**}**

**Output**

|  |  |
| --- | --- |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

**Quiz 7)**

**class Bicycle {**

**int cadence = 0;**

**int speed = 0;**

**int gear = 1;**

**void changeCadence(int newValue) {**

**cadence = newValue;**

**}**

**void changeGear(int newValue) {**

**gear = newValue;**

**}**

**void speedUp(int increment) {**

**speed = speed + increment;**

**}**

**void applyBrakes(int decrement) {**

**speed = speed - decrement;**

**}**

**void printStates() {**

**System.out.println("cadence:" +**

**cadence + " speed:" +**

**speed + " gear:" + gear);**

**}**

**}**

**class BicycleDemo {**

**public static void main(String[] args) {**

**Bicycle bike1 = new Bicycle();**

**Bicycle bike2 = new Bicycle();**

**bike1.changeCadence(50);**

**bike1.speedUp(10);**

**bike1.changeGear(2);**

**bike1.printStates();**

**bike2.changeCadence(50);**

**bike2.speedUp(10);**

**bike2.changeGear(2);**

**bike2.changeCadence(40);**

**bike2.speedUp(10);**

**bike2.changeGear(3);**

**bike2.printStates();**

**}**

**}**

**Output**

|  |  |  |
| --- | --- | --- |
| Cadence | Speed | Gear |
|  |  |  |
|  |  |  |
|  |  |  |