```
String name;
    String breed;
    int age;
    String color;
    public Dog(String name, String breed, int age, String color)
        this.name = name;
        this.breed = breed;
        this.age = age;
        this.color = color;
    public String getName()
       return name;
    public String getBreed()
       return breed;
    public int getAge()
       return age;
    public String getColor()
       return color;
    @Override
    public String toString()
        return("Hi my name is "+ this.getName()+ ".\nMy breed,age and color are "
+ this.getBreed()+", " + this.getAge()+ ", and"+ this.getColor() + ".");
    public static void main(String[] args)
        Dog scott = new Dog("Scott","papillon", 5, "black");
        System.out.println(scott.toString());
```

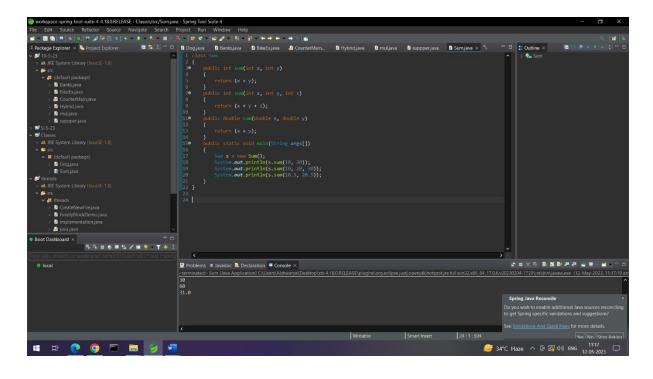
```
public class BikeEx{
    public static void main(String[] args) {
        R15 r15=new R15();
        r15.displaySpeed();
    }
}

class Bike{
    int speed=200;
}

class R15 extends Bike{
    void displaySpeed() {
        System.out.println("the bike speed is "+ speed);
    }
}
```

```
## Control Con
```

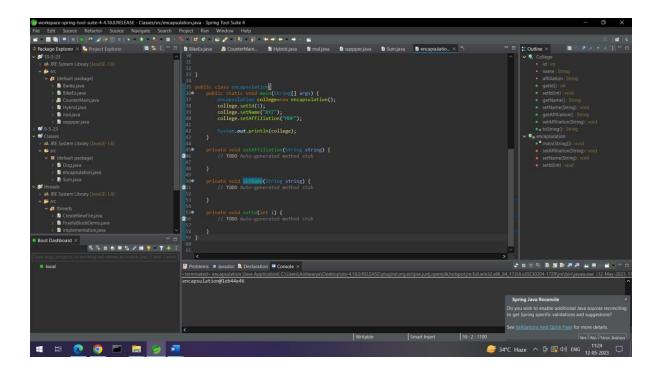
```
class Sum
{
    public int sum(int x, int y)
    {
        return (x + y);
    }
    public int sum(int x, int y, int z)
    {
        return (x + y + z);
    }
    public double sum(double x, double y)
    {
        return (x + y);
    }
    public static void main(String args[])
    {
        Sum s = new Sum();
        System.out.println(s.sum(10, 20));
        System.out.println(s.sum(10, 20, 30));
        System.out.println(s.sum(10.5, 20.5));
    }
}
```



```
class College{
       private int id;
private String name;
       private String affiliation;
       public int getId() {
              return id;
       public void setId(int id) {
              this.id = id;
       public String getName() {
              return name;
       public void setName(String name) {
              this.name = name;
       public String getAffiliation() {
              return affiliation;
       public void setAffiliation(String affiliation) {
              this.affiliation = affiliation;
       @Override
       public String toString() {
    return "College [id=" + id + ", name=" + name + ", affiliation=" +
affiliation + "]";
       }
```

```
public class encapsulation{
    public static void main(String[] args) {
        encapsulation college=new encapsulation();
        college.setId(1);
        college.setName("XYZ");
        college.setAffiliation("MNP");

        System.out.println(college);
    }
}
```



```
abstract class Animal {
    // Abstract method (does not have a body)
    public abstract void animalSound();
    // Regular method
    public void sleep() {
        System.out.println("Zzz");
    }
}

// Subclass (inherit from Animal)
class Pig extends Animal {
    public void animalSound() {
        // The body of animalSound() is provided here
        System.out.println("The pig says: wee wee");
    }
}

class aish {
    public static void main(String[] args) {
        Pig myPig = new Pig(); // Create a Pig object
```

```
myPig.animalSound();
  myPig.sleep();
}
```

