

FlyingObject.java is provided as a supplement to the following questions

1. Fully implement a concrete **Airplane** class which is a subclass to **FlyingObject** with the correct constructor, abstract methods, and any additional instance variables or methods needed. **Airplane** has a data field `boolean engineStatus` that indicates whether the Airplane can fly or not. The following code segment shows an example of using the **Airplane** class:

```
FlyingObject a = new Airplane ("AC907", false);
System.out.println(a.isFlying()); // prints false
System.out.println(a.getName()); // prints AC907 a.fly();

        System.out.println(a.isFlying()); // prints true
```

2. Fully implement a concrete **Parrot** class which is a subclass to **FlyingObject** with the correct constructor, abstract methods, and any additional instance variables or methods needed. **Parrot** has a data field `int age` that stores the age of the parrot. Parrot has another field `String sound` that stores the sound Parrot can make when it speaks. Parrot cannot speak and fly at the same time. The following code segment shows an example of using the **Parrot** class:

```
FlyingObject p = new Parrot ("Abby",2, "I'm Abby");
System.out.println(p.isFlying()); // prints false
System.out.println(p.getName()); // prints Abby
System.out.println((Parrot)p.getAge()); // prints 2
p.fly();

System.out.println(p.isFlying()); // prints true

(Parrot)p.speak(); // prints I'm Abby
System.out.println(p.isFlying()); // prints false
```