Write a Java program to create an abstract class Bird with abstract methods fly() and makeSound(). Create subclasses Eagle and Hawk that extend the Bird class and implement the respective methods to describe how each bird flies and makes a sound.

Sample Solution:

Java Code:

```java
// Bird.java
// Define an abstract class named Bird
abstract class Bird {
  // Declare an abstract method named fly
  public abstract void fly();

  // Declare an abstract method named makeSound
  public abstract void makeSound();
}
```

```java
// Eagle.java
// Define a class named Eagle that extends Bird
class Eagle extends Bird {

  // Override the fly method from Bird
  @Override
  // Implementation of the fly method that prints a message
  public void fly() {
    System.out.println("Eagle: Flying high in the sky.");
  }

  // Override the makeSound method from Bird
  @Override
  // Implementation of the makeSound method that prints a message
  public void makeSound() {
    System.out.println("Eagle: Screech! Screech!");
  }
}
```

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```java
// Hawk.java
// Define a class named Hawk that extends Bird
class Hawk extends Bird {
```

```java
    // Override the fly method from Bird
    @Override
    // Implementation of the fly method that prints a message
    public void fly() {
       System.out.println("Hawk: Soaring through the air.");
    }

    // Override the makeSound method from Bird
    @Override
    // Implementation of the makeSound method that prints a message
    public void makeSound() {
       System.out.println("Hawk: Caw! Caw!");
    }
}
```

```java
// Main.java
// Define a public class named Main
public class Main {
  // Define the main method, which is the entry point of the program
  public static void main(String[] args) {
    // Create an instance of Eagle and assign it to a Bird reference
    Bird eagle = new Eagle();
    // Create an instance of Hawk and assign it to a Bird reference
    Bird hawk = new Hawk();

    // Call the fly method on the eagle object
    eagle.fly();
    // Call the makeSound method on the eagle object
    eagle.makeSound();

    // Call the fly method on the hawk object
    hawk.fly();
    // Call the makeSound method on the hawk object
    hawk.makeSound();
  }
}
```

Output:

```
Eagle: Flying high in the sky.
Eagle: Screech! Screech!
```

```
Hawk: Soaring through the air.
Hawk: Caw! Caw!
```

Explanation: