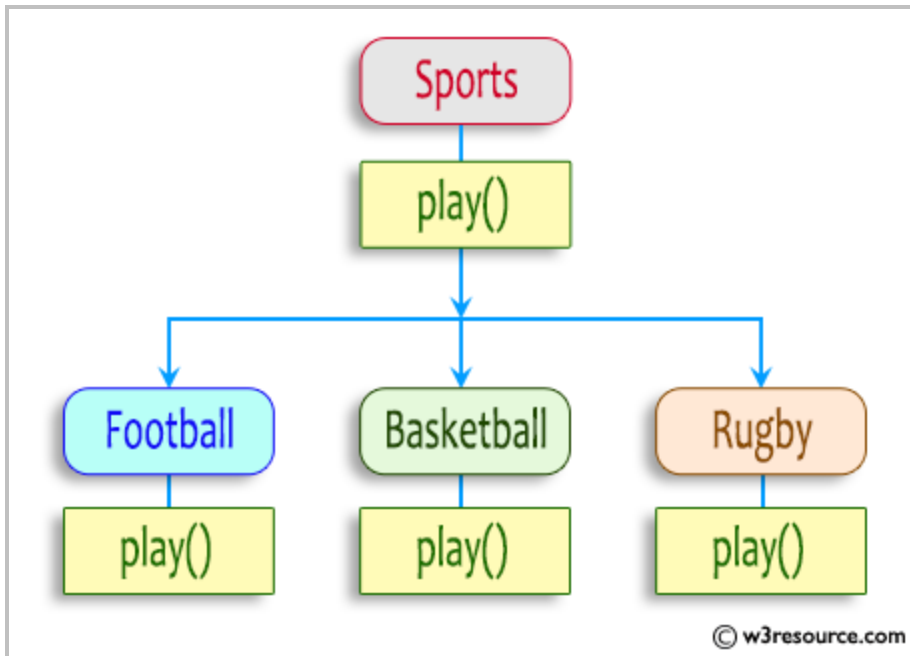Write a Java program to create a base class Sports with a method called play(). Create three subclasses: Football, Basketball, and Rugby. Override the play() method in each subclass to play a specific statement for each sport.

In the given exercise, here is a simple diagram illustrating polymorphism implementation:



In the above diagram, the Sports class is the base class with a play() method. The Football, Basketball, and Rugby classes are subclasses that inherit from the Sports class and override the play() method to provide their specific implementation.

**Sample Solution:**

**Java Code:**

```java
// Sports.java
// Base class Sports

// Define the Sports class
class Sports {

    // Public method play that prints a message to the console
    public void play() {
        // Print "Playing a sport..." followed by a new line
        System.out.println("Playing a sport...\n");
    }
}
```

```java
// Football.java
// Subclass Football

// Define the Football class as a subclass of Sports
class Football extends Sports {

    // Override the play method from the Sports class
    @Override
    public void play() {
        // Print "Playing football..." to the console
        System.out.println("Playing football...");
    }
}
```

```java
// Basketball.java
// Subclass Basketball
class Basketball extends Sports {  // Declare a subclass Basketball that e>
    @Override  // Override the play method from the Sports class
    public void play() {  // Define the play method
        System.out.println("Playing basketball...");  // Print "Playing ba:
    }
}
```

```java
// Rugby.java
// Subclass Rugby

class Rugby extends Sports {  // Declare a subclass Rugby that extends the
    @Override  // Override the play method from the Sports class
    public void play() {  // Define the play method
        System.out.println("Playing rugby...");  // Print "Playing rugby..
    }
}
```

```java
// Main.java
// Main class
public class Main {  // Declare the Main class
    public static void main(String[] args) {  // Define the main method
        Sports sports = new Sports();  // Create an instance of the Sports
        Football football = new Football();  // Create an instance of the F
        Basketball basketball = new Basketball();  // Create an instance of
```

```
        Rugby rugby = new Rugby();  // Create an instance of the Rugby clas

        sports.play();  // Call the play method on the Sports instance
        football.play();  // Call the play method on the Football instance
        basketball.play();  // Call the play method on the Basketball insta
        rugby.play();  // Call the play method on the Rugby instance
    }
}
```

Output:

```
Playing a sport...

Playing football...
Playing basketball...
Playing rugby...
```

**Flowchart:**