Sumedh ahire
FYMCA-B 03
BATCH 1
ASSIGNEMT 7

CODE:

```java
public class Player {

    private String name;

    public Player(String name) {
        this.name = name;
    }

    public void practice() {
        System.out.println(name + " is practicing.");
    }

    public String getName() {
        return name;
    }
}

class Cricket_player extends Player {

    private double battingAverage;

    public Cricket_player(String name, double battingAverage) {
        super(name);  // Call the superclass constructor
        this.battingAverage = battingAverage;
    }

    public void playCricket() {
        System.out.println(getName() + " is playing cricket with a batting average of " + battingAverage + ".");
    }
}

class Football_player extends Player {

    private String position;

    public Football_player(String name, String position) {
        super(name);  // Call the superclass constructor
        this.position = position;
    }

    public void playFootball() {
        System.out.println(getName() + " is playing football at the " + position + " position.");
    }
}

class Hockey_player extends Player {

    private int slapShotSpeed;
```

```java
    public Hockey_player(String name, int slapShotSpeed) {
        super(name);  // Call the superclass constructor
        this.slapShotSpeed = slapShotSpeed;
    }

    public void playHockey() {
        System.out.println(getName() + " is playing hockey with a slap shot speed of " + slapShotSpeed + "
mph.");
    }
}

public class Main {

    public static void main(String[] args) {

        Player player1 = new Player("John Doe");
        player1.practice();  // Call a method from the base class

        Cricket_player cricketer = new Cricket_player("Sachin Tendulkar", 54.05);
        cricketer.practice();  // Inherited method from Player
        cricketer.playCricket();  // Specific method of Cricket_player

        Football_player footballer = new Football_player("Lionel Messi", "Forward");
        footballer.practice();  // Inherited method from Player
        footballer.playFootball();  // Specific method of Football_player

        Hockey_player hockeyPlayer = new Hockey_player("Alexander Ovechkin", 100);
        hockeyPlayer.practice();  // Inherited method from Player
        hockeyPlayer.playHockey();  // Specific method of Hockey_player
    }
}
```

OUTPUT:

```
ohn Doe is practicing.
achin Tendulkar is practicing.
achin Tendulkar is playing cricket with a batting average of 54.05.
ionel Messi is practicing.
ionel Messi is playing football at the Forward position.
lexander Ovechkin is practicing.
lexander Ovechkin is playing hockey with a slap shot speed of 100 mph.
```