BASKETBALL PLAYER CLASS

package Assignment;  
  
import org.w3c.dom.ls.LSOutput;  
  
public class BasketballPlayer {  
 protected String name;  
 protected String position;  
 protected String team;  
 protected int height;  
 protected int weight;  
 protected int agility;  
 protected int speed;  
 protected int ballHandling;  
 int value;  
  
 //constructors  
 public BasketballPlayer() {  
 String name = "unknown";  
 String position = "unknown";  
 String team = "unknown";  
 int height = 0;  
 int weight = 0;  
 int agility = 0;  
 int speed = 0;  
 int ballHandling = 0;  
 }  
  
 public BasketballPlayer(String name , String position , String team) {  
 this.name = name;  
 this.position = position;  
 this.team = team;  
 int height = 0;  
 int weight = 0;  
 int agility = 0;  
 int speed = 0;  
 int ballHandling = 0;  
 }  
  
 public BasketballPlayer(String name,String position,String team,int height,int weight,int agility,int speed,int ballHandling) {  
 this.name = name;  
 this.position = position;  
 this.team = team;  
 this.height = height;  
 this.weight = weight;  
 this.agility = agility;  
 this.speed = speed;  
 this.ballHandling = ballHandling;  
 }  
 // accessors  
 public String getName() {  
  
 return name;  
 }  
 public String getPosition() {  
  
 return position;  
 }  
 public String getTeam() {  
 return team;  
 }  
 public int getHeight() {  
 return height;  
 }  
 public int getWeight() {  
  
 return weight;  
 }  
 public int getAgility() {  
 return agility;  
 }  
 public int getSpeed() {  
 return speed;  
 }  
 public int getBallHandling() {  
 return ballHandling;  
 }  
  
 //toString  
 public String toString() {  
 return "Name: " + getName() + "\n" + "Position: " + getPosition() + "\n" + "Team: " + getTeam();  
 }  
  
 //getValue  
 public int getValue() {  
  
 // Center Position  
 if (position=="centre") {  
 if (height>=82&&(weight>=220&&weight<=250)&&ballHandling>5) {  
 value=10;  
 } else if (height>=80&&(weight>=210&&weight<=260)&&ballHandling>5) {  
 value=8;  
 } else if (height >= 80&&ballHandling>4) {  
 value=6;  
 } else if (height >= 78&&agility > 7) {  
 value=5;  
 } else if (height >= 78) {  
 value=4;  
 } else if (height >= 76&&agility > 5) {  
 value=2;  
 } else {  
 value=0;  
 }  
 }  
  
 // Forward Position  
 if (position=="forward") {  
 if (height>=80&&(agility>8||speed>7)) {  
 value=10;  
 } else if (height>=78&&agility>6&&speed>5) {  
 value=8;  
 } else if (height >= 77&&agility>5) {  
 value=6;  
 } else if (height >= 76&&speed > 4) {  
 value=5;  
 } else if (height >= 75&&(agility>3||speed>3)) {  
 value=3;  
 } else if (height >= 74) {  
 value=1;  
 } else {  
 value=0;  
 }  
 }  
  
 // Guard Position  
 if (position=="guard") {  
 if (height>=78&&(agility>7||speed>7)&&ballHandling>7) {  
 value=10;  
 } else if (height>=76&&(agility>6||speed>6)&&ballHandling>7) {  
 value=8;  
 } else if (height >= 74&&ballHandling>5&&agility>5&&speed>6) {  
 value=6;  
 } else if (ballHandling>6&&agility>6&&speed>5) {  
 value=4;  
 } else if (ballHandling>4 && agility > 4) {  
 value=2;  
 } else {  
 value=0;  
 }  
 }  
 return value;  
 }  
  
  
}

COLLEGE BASKETBALL PLAYER CLASS

package Assignment;  
  
public class CollegeBasketballPlayer extends BasketballPlayer {  
 private int eligibilityRemaining;  
 private String role;  
  
 public CollegeBasketballPlayer() {  
 super();  
 int eligibilityRemaining = 4;  
 String role = "bench";  
 }  
  
 public CollegeBasketballPlayer(String name , String position , String team) {  
 super(name,position,team);  
 int eligibilityRemaining = 4;  
 String role = "bench";  
 }  
  
 public CollegeBasketballPlayer(String name,String position,String team,int height,int weight,int agility, int speed,int ballHandling,int eligibilityRemaining,String role) {  
 super(name,position,team,height,weight,agility,speed,ballHandling);  
 this.eligibilityRemaining = eligibilityRemaining;  
 this.role = role;  
 }  
  
 public int getEligibilityRemaining() {  
 return eligibilityRemaining;  
 }  
  
 public String getRole() {  
 return role;  
 }  
  
 public String toString() {  
 return super.toString() + "\n" +"Role: "+ getRole() +"\nEligibility: "+ getEligibilityRemaining() ;  
 }  
  
 public boolean draftable() {  
 if ((role=="Starter" && super.getValue()>4) || (role=="Bench" && super.getValue()>=8)) {  
 // This is unnecessary , just my shobo  
 System.*out*.println("Player is draftable");  
 }  
 return true;  
 }  
}

PRO BASKETBALL PLAYER CLASS

package Assignment;  
  
public class ProBasketballPlayer extends BasketballPlayer {  
 private String role;  
 private int yearsInLeague;  
  
 public ProBasketballPlayer() {  
 super();  
 int yearsInLeague = 0;  
 String role = "bench";  
 }  
  
 public ProBasketballPlayer(String name , String position , String team) {  
 super(name,position,team);  
 int yearsInLeague = 0;  
 String role = "bench";  
 }  
  
 public ProBasketballPlayer(String name,String position,String team,int height,int weight,int agility, int speed,int ballHandling,int yearsInLeague,String role) {  
 super(name,position,team,height,weight,agility,speed,ballHandling);  
 this.yearsInLeague = yearsInLeague;  
 this.role = role;  
 }  
  
 public int getYearsInLeague() {  
 return yearsInLeague;  
 }  
  
 public String getRole() {  
 return role;  
 }  
  
 public String toString() {  
 return super.toString() + "\n" +"Role: "+ getRole() +"\nYears on League: "+ getYearsInLeague() ;  
 }  
  
 public int newContractValue(int contractValue) {  
 // Starter Role  
 if(role=="Starter"){  
 if(yearsInLeague>=10 && super.getValue()>8){  
 contractValue=12000000;  
 } else if (yearsInLeague>=8 && super.getValue()>7) {  
 contractValue=10000000;  
 } else if (yearsInLeague>=5 && super.getValue()>7) {  
 contractValue=8000000;  
 } else if (yearsInLeague>=10 && super.getValue()>5) {  
 contractValue=6000000;  
 } else if (yearsInLeague>=5) {  
 contractValue=2000000;  
 } else {  
 contractValue=1000000;  
 }  
 } else {  
 contractValue=0;  
 }  
 // Bench Role  
 if(role=="Bench"){  
 if (yearsInLeague>=10 && super.getValue()>8){  
 contractValue=7500000;  
 } else if (yearsInLeague>=8 && super.getValue()>7) {  
 contractValue=5000000;  
 } else if (yearsInLeague>=10 && super.getValue()>5) {  
 contractValue=4500000;  
 } else if (yearsInLeague>=7) {  
 contractValue=2000000;  
 } else {  
 contractValue=500000;  
 }  
 } else {  
 contractValue=0;  
 }  
 return contractValue;  
 }  
}

USER CLASS

package Assignment;  
  
public class User {  
 public static void main(String[] args) {  
 // Object creation  
 BasketballPlayer bp1 = new BasketballPlayer();  
 CollegeBasketballPlayer bp2 = new CollegeBasketballPlayer();  
 ProBasketballPlayer bp3 = new ProBasketballPlayer();  
  
  
 }  
}