```
//Assignment 1 - Task 1
//Health Profile class
//Algonquin College - Fall 2015
//Last modified: October 17, 2015

import java.util.Calendar;
public class HealthProfile {

	private String firstName;
	private String lastName;
	private String gender;
	private int YOB;
	private double height;
	private double weight;

	public HealthProfile (String first, String last, String gen, int Y,double hei, double wei)

	{
		firstName = first;
		lastName = last;
		gender = gen;
		YOB = Y;
		height = hei;
		weight = wei;
	}
	public void setFirstName( String first )
	{
		this.firstName = first;
	}
```

```
public String getFirstName()
{
        return firstName;
}


public void setLastName( String last )
{
        lastName = last;
}
public String getLastName()
{
        return lastName;
}


public void setGender( String gen )
{
        gender = gen;
}
public String getGender()
{
        return gender;
}

public void setYear( int Y )
{
        YOB = Y;
}
```

```
public int getYear()
{
        return YOB;
}

public void setHeight( double hei )
{
        height = hei;
}
public double getHeight()
{
        return height;
}
public void setWeight( double wei )
{
        weight = wei;
}
public double getWeight()
{
        return weight;
}

public  double BMI()
{
        this.getWeight();
        this.getHeight();
        double bmi=(getWeight()*703)/(getHeight()*getHeight());
        return bmi;
}
```

```
	public int AGE()
	{
		int currentYear = Calendar.getInstance().get(Calendar.YEAR);
		int age = currentYear - YOB;
		return age;
	}

	public double MHR()
	{
		this.AGE();
		int mhr = (220 - AGE());
		return mhr;
	}

	public double minMHR()
	{
		this.MHR();
		int minthr = (int) (MHR()/2);
		return minthr;
	}

	public double maxMHR()
	{
		this.MHR();
		int maxthr = (int) ((MHR()/100) * 85);
		return maxthr;
	}
}
```

```
//Assignment 1 - Task 1
//Health Profile Main class
//Algonquin College - Fall 2015
//Last modified: October 17, 2015

import java.util.Scanner;
public class HealthProfileTest {

	public static void main(String[] args) {

		HealthProfile user = new HealthProfile(null, null, null, 0, 0, 0);

		Scanner input = new Scanner(System.in);

		System.out.printf("Enter user's first name: ");
		String fi = input.next();
		user.setFirstName(fi);

		System.out.printf("Enter user's last name: ");
		String la = input.next();
		user.setLastName(la);

		System.out.printf("Enter user's gender: ");
		String gen = input.next();
		user.setGender(gen);
```

```
                System.out.printf("Enter user's height in inches: ");
                int hei = input.nextInt();
                user.setHeight(hei);

                System.out.printf("Enter user's weight in pounds: ");
                int wei = input.nextInt();
                user.setWeight(wei);

                System.out.printf("Enter user's year of birth: ");
                int date = input.nextInt();
                user.setYear(date);

                System.out.println();
                System.out.println("Health Profile for "+user.getFirstName()+"
"+user.getLastName()+":");
                System.out.println("Gender: "+user.getGender());
                System.out.println("Age: "+user.AGE());
                System.out.println("Height (in inches): "+user.getHeight());
                System.out.println("Weight (in pounds): "+user.getWeight());
                System.out.println("Maximum Heart Rate: "+user.MHR());
                System.out.println("Target Hearth Rate Range:");
                System.out.println("      Minimum: "+user.minMHR());
                System.out.println("      Maximum: "+user.maxMHR());
                System.out.printf("BMI (Body Mass Index): %.2f\n",user.BMI());
                System.out.println();
                System.out.println("-----BMI REFERENCE VALUES:-----");
                System.out.println("------------------------------");
                System.out.println("Underweight: less than 18.5");
                System.out.println("Normal: between 18.5 and 24.9");
```

```
                System.out.println("Overweight: between 25 and 29.9");
                System.out.println("Obese: 30 or greater");

                input.close();

        }
}
```