## **4.04** Assignment Instructions

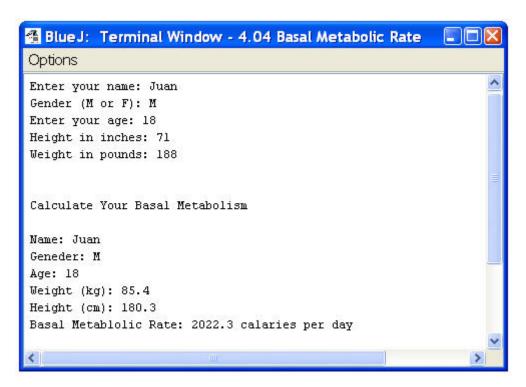
**Instructions:** Write a program to calculate your heart basal metabolic rate (BMR). (This program is not difficult, but it does require attention to detail. Use previous assignments and demo programs as models.)

1. Create a new project called 4.04 Basal Metabolic Rate in your Mod04 Assignments folder.



- 2. Create a class called BMR in the newly created project folder.
- 3. Before beginning the assignment, learn about the <u>Harris-Bennedict</u> Formula for determining the basal metabolic rate (BMR).
- 4. Ask the user to enter their first name, gender (M or F), age, height (in inches), and weight (in pounds).
- 5. Convert height to centimeters and weight to kilograms. You should have conversion factors for English to metric units available from an earlier program.
- 6. Calculate the BMR for males or females.
- 7. Display the output in a user-friendly fashion.

**Expected Output:** When the program runs correctly, you should see results similar to the following (output will obviously vary with each individual).



**Optional:** 

With a little math manipulation, the number of decimal places can be formatted. Try to write an arithmetic expression that will display **doubles** to only one decimal place. (Hint: Write a decimal number with four or five decimal places on a piece of paper. What kind of arithmetic will move the decimal point around within the number? Don't forget about casting, too.)