

Ideal Weight Project (Due 2/2/07)
BE-205, Winter '06-'07, Dr. C. S. Tritt

Background

According to Robinson et al (1983, page 1016, second column, first paragraph), these equations were proposed by Devine based on the empirical estimates of his mentor Dr Margaret McCarron:

Ideal body weight in kilograms for males = $50 + (2.3 * ((\text{height in inches}) - 60))$

Ideal body weight in kilograms for females = $45.5 + (2.3 * ((\text{height in inches}) - 60))$

where:

- "60" indicates inches in 5 feet.
- Handling of patients with height less than 5 feet is unclear.
- According to Robinson et al, these equations underestimate the slope and overestimate the intercept in the approximation line. These cancel each other out for people of average height but may introduce errors for those who are particularly tall or short.

Assignment

Write program having a graphical user interface that calculates the ideal weight of an individual given their height and sex. For full credit your program must use 2 radio buttons in a button group for specification of the individual's sex. You may use alternative, more modern and widely accepted equations for your program provided that you document their source.

Documentation

Use my GUI demonstration/example program documentation as a guide to how you should document your program. In addition to the sections in my standard documentation (Background and Equations, Operational Description, User Interface Description, Algorithm(s)) include a "Testing" section in your report.

Reference: The Medical Algorithms Project (<http://www.medal.org/visitor/login.aspx>)