

COP 1334C

Extra Credit Programming Problem

5 points

BMI

File names: bmialg.txt, bmi.cpp

The body mass index (BMI) is calculated as a person's weight (in pounds) times 720, divided by the square of the person's height (in inches). Write a program that calculates a person's BMI and prints a message telling whether they are above, within, or below the healthy range.

A person is healthy if their BMI falls between 18.5 and 24.9.

Input validation: Do not accept negative numbers as input.

Example output:

WELCOME TO THE BMI CALCULATOR!!

Please enter your weight (lb): -10

Invalid. Weight cannot be a negative number.

Please enter your weight (lb): 140

Please enter your height (in): -3

Invalid. Height cannot be a negative number.

Please enter your height (in): 68

*****Results*****

BMI: 21.8

Congratulations! You are a healthy weight!