

Engineering 1181 HW 9 (Problem taken from MATLAB textbook Chapt 6 prob. 26.)

The Body Mass Index (BMI) is a measure of obesity. To calculate BMI use the formula below:

$$\text{BMI} = \frac{703(W)}{H^2} \quad W = \text{weight in pounds} \quad H = \text{Height in inches}$$

The classification of a person's BMI is as follows:

BMI	Classification
< 18.5	Underweight
18.5 to <25	Normal
25 to 29.9	Overweight
>29.9	Obese

Write a MATLAB program that stores the following data in one or more arrays. Using the following data determines each person's BMI. The program must print out using an fprintf and/or disp commands each person's initials, their BMI and what their weight classification is. You might wish to store the names in a separate array since they are alphanumeric. Your program must contain at least one loop and use the conditional operator 'if'.

Name	Height	Weight (lbs)
A.A.	6 ft. 2 in.	180
B.B.	5 ft. 1 in.	150
C.C.	5 ft. 7 in.	112
D.D	5 ft. 10 in.	160
E.E.	5 ft. 9 in.	170
F.F.	5 ft. 5 in.	185