**Assignment 16.1**

1. Write a function that to calculate BMI (Body Mass Index):

• BMI for a person is defined as their body mass divided by the square of their height

• The weight is in kilograms and the height in meters or

• (The weight can be in pounds and the height in inches)\* 703

• Check your BMI:

**ANS:**

**BMI = function(){**

**cat("Please enter your height in inches and weight in pounds :","\n")**

**height = as.numeric(readline("height = " ))**

**weight = as.numeric(readline("weight = " ))**

**bmi = weight/(height\*height)\*703**

**cat("your body mass index is:",bmi ,"\n")**

**# Very severly Underweight = <15**

**# severly Underweight = <15.0-16.0**

**# Underweight = <16.0-18.5**

**# Normal weight = <18.5–25.0 [inches]: "))**

**# Overweight = <25–30.0**

**# Obese Class 1 = <30.0-35.0**

**# Obese Class 2 = <35.0–40.0**

**# Obese Class 3 = BMI of 40 or greater**

**if(bmi<15) risk = "Very severly Underweight"**

**else if(bmi<16) risk = "severly Underweight"**

**else if(bmi<18.5) risk = "Underweight"**

**else if(bmi<25) risk = "Normal weight "**

**else if(bmi<30) risk = "Overweight"**

**else if(bmi<35) risk = "Obese Class 1 "**

**else if(bmi<40) risk = " Obese Class 2"**

**else risk = "Obese Class 3"**

**cat("your bmi is in the",risk,"category.","\n")**

**}**

**BMI()**

