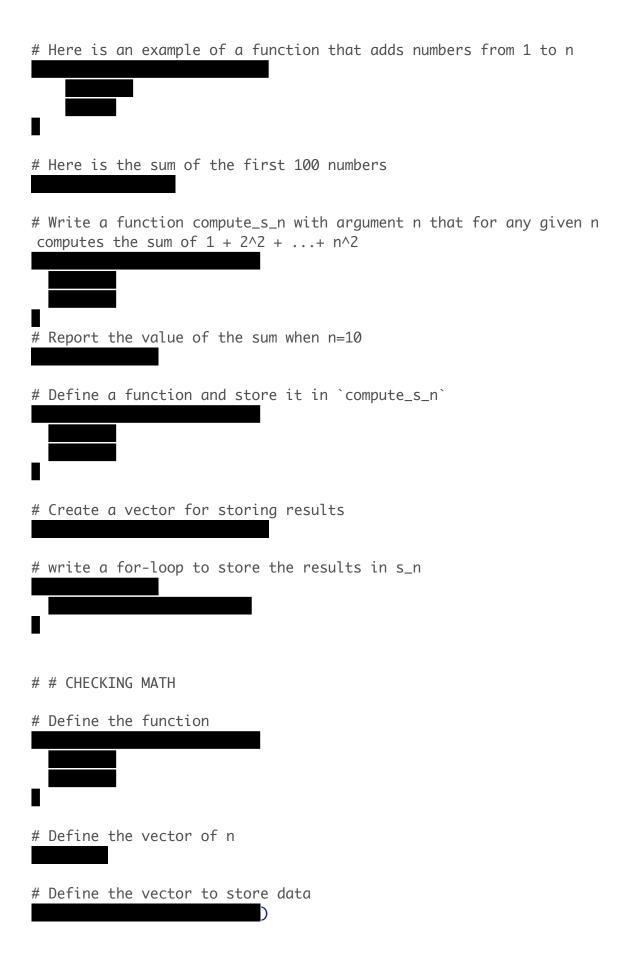
```
# Yannique Hecht
# Harvardx: PH125.1x - (1) Data Science: R Basics
# SECTION 4: PROGRAMMING BASICS
# ASSESSMENTS
# # # ASSESSMENT 4.0: PROGRAMMING BASICS
# # IFELSE
# Assign the state abbreviation when the state name is longer than 8
characters
# # DEFINING FUNCTIONS
# Create function called `sum_n`
# Use the function to determine the sum of integers from 1 to 5000
# # LEXICAL SCOPE
# Run this code
# Print the value of x
```

FOR LOOPS



Create the plot

Check that s_n is identical to the formula given in the instructions.

SECTION 1 ASSESSMENT

Q1 Write an ifelse statement that returns 1 if the sex is Female
and 2 if the sex is Male. What is the sum of the resulting vector?

Q2 Write an ifelse statement that takes the height column and returns the height if it is greater than 72 inches and returns 0 otherwise. What is the mean of the resulting vector?

Q3 Write a function inches_to_ft that takes a number of inches x and returns the number of feet. One foot equals 12 inches. What is inches_to_ft(144)?

How many individuals in the heights dataset have a height less than 5 feet?

Q4 Which of the following are TRUE?

Q5 Given an integer x, the factorial of x is called x! and is the product of all integers up to and including x. The factorial() function computes factorials in R. For example, factorial(4) returns $4! = 4 \times 3 \times 2 \times 1 = 24$. Complete the code above to generate a vector of length m where the first entry is 1!, the second entry is 2!, and so on up to m!.