DS 710 - R Programming Assignment

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# \*\* R Programming Assignment \*\*

## 1.1 Calculate the cube root of 2015, as follows:

2015^(1/3)

## [1] 12.63063

## 1.2 Find the absolute value of 5.7 minus 6.8 divided by .58:

abs(5.7-6.8)/.58

## [1] 1.896552

## 1.3 Create a list of integers from 1 to 12 and call it "a":

a = 1:12  
a

## [1] 1 2 3 4 5 6 7 8 9 10 11 12

## 1.4 Create a sequence of odd numbers from 1 to 11:

b = c(1, 3, 5, 7, 9, 11)  
b

## [1] 1 3 5 7 9 11

## 1.5 Create the same sequence in another way:

c = seq(1,11, 2)  
c

## [1] 1 3 5 7 9 11

## 1.6 Take the natural log (ln) of a. (Note that this is done to the entire "vector" called a.)

ln.a = log(a)  
ln.a

## [1] 0.0000000 0.6931472 1.0986123 1.3862944 1.6094379 1.7917595 1.9459101  
## [8] 2.0794415 2.1972246 2.3025851 2.3978953 2.4849066

## 1.7 Compute the squares of the odd numbers from 1 to 11.

for(i in seq(from=1, to=11, by=2)){  
 print(i^2)  
}

## [1] 1  
## [1] 9  
## [1] 25  
## [1] 49  
## [1] 81  
## [1] 121

## ##1.8 Use ?sd to view the help file for the sd function. What does it do?

## #?sd Opens up the help page for standard deviation. Help includes description, usage, arguments and details about SD

## 1.9. Create a variable Name that contains your first name. Because your name is a character string, not a number, you will need to put it in quotes so that R knows not to go looking for a variable with that name:

Name <- "Samuthrakumar Venugopalan"  
paste("My name is", Name)

## [1] "My name is Samuthrakumar Venugopalan"