5. Problem Statement Use the below data find the relationship between age (in months) and height (Average height in cm)

• age=16:27

• height=c(61.1,61.2,61.8,62.8,63.5,76.1,77,78.1,78.2,78.8,79.7,79.9)

1) check that age and height have the same number of elements

2) Create a scatterplot to determine the relationship between age and height

3) Create a "linear model" to fits the data above

4) Find the equation of the line of best fit

Answer 1)

Age <- 16:27

Height <- c(61.1,61.2,61.8,62.8,63.5,76.1,77,78.1,78.2,78.8,79.7,79.9)

A <- length(Age)

B <- length(Height)

if (A-B == 0){

print("Length of the vectors Age and Height is equal")

}else{

print("Length of the vectors Age and Height is equal")

}

OUTPUT:-

[1] "Length of the vectors Age and Height is equal"

Answer 2)