**R Code – Unexecuted**

**#--------HW1:Intro------------**

#Define the vectors height and weight

height <- c(59,60,61,58,67,72,70)

weight <- c(150,140,180,220,160,140,130)

#return height and weight

weight

height

#define variable a

a <- 150

a

**#------------------**

**#--------Step 1: Calculating Means------------**

#compute average height

mean(height)

#compute average weight

mean(weight)

#length of height and weight

length(height)

length(weight)

length(height)+length(weight)

#sum of heights

sum(height)

#average both height and weight

sum(weight)/length(weight)

sum(height)/length(height)

**#--------------------**

**#--------Step 2: Max/Min-----------**

#max/min

max(height)

maxH <- max(height)

maxH

min(weight)

minW <- min(weight)

minW

**#-----------------**

**#--------Step 3: Vector Math------------**

#vector math

weight + 5

gainedweight <- weight + 5

gainedweight

height + 5

gainedheight <- height + 5

gainedheight

**#------------------**

**#--------Step 4: If Statements-----------**

#using conditional if statements

if(max(height) > 60) {print("yes")} else {print("no")}

if(min(weight) > a ) {print("yes")} else {print("no")}

**R Code – Executed**

> #Define the vectors height and weight

> height <- c(59,60,61,58,67,72,70)

> weight <- c(150,140,180,220,160,140,130)

>

> #return height and weight

> weight

[1] 150 140 180 220 160 140 130

> height

[1] 59 60 61 58 67 72 70

>

> #define variable a

> a <- 150

> a

[1] 150

> #compute average height

> mean(height)

[1] 63.85714

> #compute average weight

> mean(weight)

[1] 160

> #length of height and weight

> length(height)

[1] 7

> length(weight)

[1] 7

> length(height)+length(weight)

[1] 14

> #sum of heights

> sum(height)

[1] 447

> #average both height and weight

> sum(weight)/length(weight)

[1] 160

> sum(height)/length(height)

[1] 63.85714

>

> #max/min

> max(height)

[1] 72

> maxH <- max(height)

> maxH

[1] 72

>

> min(weight)

[1] 130

> minW <- min(weight)

> minW

[1] 130

>

>

> #vector math

> weight + 5

[1] 155 145 185 225 165 145 135

> gainedweight <- weight + 5

> gainedweight

[1] 155 145 185 225 165 145 135

>

> height + 5

[1] 64 65 66 63 72 77 75

> gainedheight <- height + 5

> gainedheight

[1] 64 65 66 63 72 77 75

>

>

> #using conditional if statements

> if(max(height) > 60) {print("yes")} else {print("no")}

[1] "yes"

>

> if(min(weight) > a ) {print("yes")} else {print("no")}

[1] "no"