**INPUT :**

#Given data

Nh <- c(724,648,560,344,81)

nh <- c(61,55,49,29,9)

fh <- c(4246,11636,15957,23586,29667)

sh\_sq <- c(22.76,56.6,71.4,192.4,334.7)

#Calculation population total of (t)

t <- sum(Nh/nh\*fh)

#Calculate total number of frames (n)

n <- sum(Nh)

#Calculate the average number of cattle per farm (y)

y <- t/n

#Calculate the Standard Error(SE)

se <- sqrt(sum(sh\_sq\*(Nh/nh^2)\*(Nh-nh)/(Nh^2)))

#print the results

cat("Estimated average number of cattle per farm (y) :",y,"\n")

cat("Estimated population total :",t,"\n")

cat("Estimated error (SE) of the estimate :",se,"\n")

**OUTPUT :**

> cat("Estimated average number of cattle per farm (y) :",y,"\n")

Estimated average number of cattle per farm (y) : 388.8994

> cat("Estimated population total :",t,"\n")

Estimated population total : 916635.9

> cat("Estimated error (SE) of the estimate :",se,"\n")

Estimated error (SE) of the estimate : 1.983009