How to handle missing values in a data set.

Exercise 1
If `X <- c (22,3,7,NA,NA,67)` what will be the output for the R statement `length(X)`

Exercise 2
If `X = c(NA,3,14,NA,33,17,NA,41)` write some R code that will remove all occurrences of NA in X.
a. `X[!is.na(X)]`
b. `X[is.na(X)]`
c. `X[X==NA]= 0`

Exercise 3
If `Y = c(1,3,12,NA,33,7,NA,21)` what R statement will replace all occurrences of NA with 11?
a. `Y[Y==NA]= 11`
b. `Y[is.na(Y)]= 11`
c. `Y[Y==11] = NA`

Exercise 4
If `X = c(34,33,65,37,89,NA,43,NA,11,NA,23,NA)` then what will count the number of occurrences of NA in X?
a. `sum(X==NA)`
b. `sum(X == NA, is.na(X))`
c. `sum(is.na(X))`

Exercise 5
Consider the following vector `W <- c (11, 3, 5, NA, 6)`
Write some R code that will return `TRUE` for value of `W` missing in the vector.

Exercise 6
Load 'Orange' dataset from R using the command `data(Orange)` . Replace all values of `age=118` to NA.

Exercise 7
Consider the following vector `A <- c (33, 21, 12, NA, 7, 8)` .
Write some R code that will calculate the mean of A without the missing value.

Exercise 8
Let:
```
c1 <- c(1,2,3,NA) ;
c2 <- c(2,4,6,89) ;
c3 <- c(45,NA,66,101) .
```
If `X <- rbind (c1,c2,c3, deparse.level=1)` , write a code that will display all rows with missing values.

Exercise 9
Consider the following data obtained from `df <- data.frame (Name = c(NA, "Joseph", "Martin", NA, "Andrea"), Sales = c(15, 18, 21, 56, 60), Price = c(34, 52, 21, 44, 20), stringsAsFactors = FALSE)`
Write some R code that will return a data frame which removes all rows with NA values in `Name` column

Exercise 10

Consider the following data obtained from `df <- data.frame(Name = c(NA, "Joseph", "Martin", NA, "Andrea"), Sales = c(15, 18, 21, NA, 60), Price = c(34, 52, 33, 44, NA), stringsAsFactors = FALSE)`

Write some R code that will remove all rows with NA values and give the following output

```
Name Sales Price
2 Joseph 18 52
3 Martin 21 33
```