Task 1:

Q1. How many ways are there to call a function in R?

Ans:-   There are 3 ways to call a function in R, they are:

- Calling a function without an Argument
- Calling a function with an Argument value(by position and by name)
- Calling a function with default Argument

Q2. What is the Recycling of the elements in a vector?

Ans:-   When the elements of the vectors length are not equal, we need to recycle the elements of the shorter vector to complete the calculation.

Q3. Give an example of recycling of elements.

Ans:-   Suppose we have 2 vectors v1 <- c(1, 2, 3, 4, 5, 6) and v2 <- c(7, 8), where v2 is shorter having only 2 elements. If we add these vectors

```
v1 <- c(1, 2, 3, 4, 5, 6)

v2 <- c(7, 8) #here v2 will be c(7,8,7,8,7,8) to be equals
#with v1

Result <- v1+v2

Print(result)
```

Output will be:

8 10 10 12 12 14

Task 2:

1. What should be the output for the following script?
   ```
   v <- c(2,5.5,6)
   t <- c(8,3,4)
   print(v%/%t)
   ```

   Ans:-   0 1 1

2. You have 25 excel files with names xx_1.xlsx, xx_2.xlsx,......., xx_25.xlsx in a Dir.
   Write a program to extract the contents of each excel sheet and make it one df.

Ans:-

```
library(openxlsx)
df_total=data.frame()

#To access the different files, we have to use

files <- list.files(pattern = '*.xlsx')
length(files)
for (i in 1:length(files))
{
  filename=files[i]
  data=read.xlsx(filename,1,header=TRUE)
  df_total=rbind(df_total,data,by="id")
}

print(df_total)
data
abc = read.xlsx("Book1.xlsx",1,header=TRUE)
abc
merge(data,abc,by="id")
```