```r
#1.
#Creating columns and values for df1 and df2
Columns_ID <- 001:005
name <- c("Mark", "Brian", "Alain", "Myrone", "Chris")
age <- c(sample(18:50, 5, replace = TRUE))

Columns_ID <- 001:005
score <- c(sample(95:99, 5, replace = TRUE))
subject <- c("Science", "Science", "English", "History", "Math")

#using a function to make it a dataframe
dataframe1 <- data.frame(Columns_ID, name, age)
dataframe1
dataframe2 <- data.frame(Columns_ID, score, subject)
dataframe2

#merging df1 and df2
merged_dataframe <- merge(dataframe1, dataframe2, by="Columns_ID")
merged_dataframe


#2.
#adding a new column named "age_Group"
#using ifelse to add value depending on the value of column "age"
merged_dataframe$age_Group <- ifelse(merged_dataframe$age <= 25, "Young",
                             ifelse(merged_dataframe$age > 25 &
                                    merged_dataframe$age <= 40, "Middle-aged",
"Senior"))
merged_dataframe

#3.
#calling the agrregate function to solve for the mean
avg_score_per_age_Group <- aggregate(score ~ age_Group, merged_dataframe, mean)
avg_score_per_age_Group

#4.
#calling the order function to arrange the dataframes order
#I used "-" to arrange the score to make it in descending order because order is
ascending in default
sorted_dataframe <- merged_dataframe[order(merged_dataframe$subject, -
merged_dataframe$score), ]
sorted_dataframe


#5.
#creating a function that will use rbind to combine dataframes
binding_df <- function(...){
  #creating a list of the dataframes passed
  dataframes <- list(...)
  #using the do.call() to use rbind to combine the dataframes
  combined_df <- do.call(rbind, dataframes)
  #return the combined dataframes
  return(combined_df)
}

#create dataframes
df1 <- data.frame(ID = 1:2, name = c("Chris", "Bryan"), age = c(21,21))
df2 <- data.frame(ID = 3:4, name = c("Myrone", "Clarence"), age = c(20,20))
df3 <- data.frame(ID = 5:6, name = c("Brian", "May"), age = c(21,21))

#calling the function and assigning it in a variable
combined_df <- binding_df(df1, df2, df3)
#printing the combined dataframes
combined_df
```

```
> dataframe1
  Columns_ID   name age
1          1   Mark  47
2          2  Brian  44
3          3  Alain  33
4          4 Myrone  45
5          5  Chris  18
> dataframe2 <- data.frame(Columns_ID, score, subject)
> dataframe2
  Columns_ID score subject
1          1    99 Science
2          2    96 Science
3          3    99 English
4          4    97 History
5          5    96    Math
>
> #merging df1 and df2
> merged_dataframe <- merge(dataframe1, dataframe2, by="Columns_ID")
> merged_dataframe
  Columns_ID   name age score subject
1          1   Mark  47    99 Science
2          2  Brian  44    96 Science
3          3  Alain  33    99 English
4          4 Myrone  45    97 History
5          5  Chris  18    96    Math
>
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merged_dataframe$age_Group <- ifelse(merged_dataframe$age <= 25, "Young",
                              ifelse(merged_dataframe$age > 25 &
                                       merged_dataframe$age <= 40, "Middle-aged", "Senior"))
merged_dataframe
Columns_ID   name age score subject   age_Group
         1   Mark  47    99 Science      Senior
         2  Brian  44    96 Science      Senior
         3  Alain  33    99 English Middle-aged
         4 Myrone  45    97 History      Senior
         5  Chris  18    96    Math       Young
```

```
#3.
#calling the agrregate function to solve for the mean
avg_score_per_age_Group <- aggregate(score ~ age_Group, merged_dataframe, mean)
avg_score_per_age_Group
  age_Group    score
Middle-aged 99.00000
     Senior 97.33333
      Young 96.00000
```

```r
#4.
#calling the order function to arrange the dataframes order
#I used "-" to arrange the score to make it in descending order because order is ascending in default
sorted_dataframe <- merged_dataframe[order(merged_dataframe$subject, -merged_dataframe$score), ]
sorted_dataframe
Columns_ID   name age score subject   age_Group
        3  Alain  33    99 English Middle-aged
        4 Myrone  45    97 History      Senior
        5  Chris  18    96    Math       Young
        1   Mark  47    99 Science      Senior
        2  Brian  44    96 Science      Senior
```

```r
#5.
#creating a function that will use rbind to combine dataframes
binding_df <- function(...){
  #creating a list of the dataframes passed
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  combined_df <- do.call(rbind, dataframes)
  #return the combined dataframes
  return(combined_df)
}

#create dataframes
df1 <- data.frame(ID = 1:2, name = c("Chris", "Bryan"), age = c(21,21))
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df3 <- data.frame(ID = 5:6, name = c("Brian", "May"), age = c(21,21))

#calling the function and assigning it in a variable
combined_df <- binding_df(df1, df2, df3)
#printing the combined dataframes
combined_df
ID     name age
 1    Chris  21
 2    Bryan  21
 3   Myrone  20
 4 Clarence  20
 5    Brian  21
 6      May  21
```