```
> library(reshape)
> #Reading dataset
> data <-
read.csv(file="/home/anuj/Desktop/Assign4/dataset_Facebook.csv",header=TRUE,sep=";")
> nrow(data)
[1] 500
> ncol(data)
[1] 19
> colnames(data)
[1] "Pagetotallikes"
[2] "Type"
[3] "Category"
[4] "Post.Month"
[5] "Post.Weekday"
[6] "Post.Hour"
[7] "Paid"
[8] "Lifetime.Post.Total.Reach"
[9] "Lifetime.Post.Total.Impressions"
[10] "Lifetime.Engaged.Users"
[11] "Lifetime.Post.Consumers"
[12] "Lifetime.Post.Consumptions"
[13] "Lifetime.Post.Impressions.by.people.who.have.liked.your.Page"
[14] "Lifetime.Post.reach.by.people.who.like.your.Page"
[15] "Lifetime.People.who.have.liked.your.Page.and.engaged.with.your.post"
[16] "comment"
[17] "like"
[18] "share"
[19] "Total.Interactions"
> #Creating Subsets of Dataset
> photo <- subset( data,Type == "Photo")
> nrow(photo)
[1] 426
> ncol(photo)
[1] 19
> link <- subset( data,Type == "Link")
> nrow(link)
[1] 22
> ncol(link)
[1] 19
> video <- subset( data,Type == "Video")
> nrow(video)
[1] 7
> ncol(video)
[1] 19
> status <- subset( data,Type == "Status")
> nrow(status)
[1] 45
> ncol(status)
[1] 19
> #Sorting Subsets
> sort_photo <- photo[order(photo$Pagetotallikes),]
> sort_video <- video[order(video$Pagetotallikes),]> sort_link <- link[order(link$Pagetotallikes),]
```

```
> sort_status <- status[order(status$Pagetotallikes),]
> #Calculating Maximum shared type
> sum_photo = sum(photo$share,na.rm = TRUE)
> sum_link = sum(link$share,na.rm = TRUE)
> sum_video = sum(video$share,na.rm = TRUE)
> sum_status = sum(status$share,na.rm = TRUE)
> temp=max(sum_photo,sum_link,sum_video,sum_status)
> if(temp == sum_photo){
+ print(paste("Maximum shared type is photo with total shares = ",temp))
+ }else if (temp == sum_link){
+ message("Maximum shared type is link with total shares = ",temp)
+ }else if (temp == sum_video){
+ message("Maximum shared type is video with total shares = ",temp)
+ }else {
+ message("Maximum shared type is status with total shares = ",temp)
+ }
[1] "Maximum shared type is photo with total shares =
11461" > #Transposing Subsets
> t_photo = t(photo)
> nrow(t_photo)
[1] 19
> ncol(t_photo)
[1] 426
> rownames(t_photo)
[1] "Pagetotallikes"
[2] "Type"
[3] "Category"
[4] "Post.Month"
[5] "Post.Weekday"
[6] "Post.Hour"
[7] "Paid"
[8] "Lifetime.Post.Total.Reach"
[9] "Lifetime.Post.Total.Impressions"
[10] "Lifetime.Engaged.Users"
[11] "Lifetime.Post.Consumers"
[12] "Lifetime.Post.Consumptions"
[13] "Lifetime.Post.Impressions.by.people.who.have.liked.your.Page"
[14] "Lifetime.Post.reach.by.people.who.like.your.Page"
[15]  "Lifetime.People.who.have.liked.your.Page.and.engaged.with.your.post"
[16] "comment"
[17] "like"
[18] "share"
[19] "Total.Interactions"
> t_status = t(status)
> nrow(t_status)
[1] 19
> ncol(t_status)
[1] 45
> t_link = t(link)
> nrow(t_link)
[1] 19> ncol(t_link)
[1] 22
```

```
> t_video = t(video)
> nrow(t_video)
[1] 19
> ncol(t_video)
[1] 7
> #Melting the subset video
> melted_video <-
melt(sort_video,id.vars=c("Pagetotallikes","Type","Category"),measured.vars=c("Post
Month","Post Weekday","Post Hour","Paid"))
> melted_video
> nrow(melted_video)
[1] 112
> ncol(melted_video)
[1] 5
> colnames(melted_video)
[1]  "Pagetotallikes"  "Type"
"Category"
"variable"
> #Casting the subset video
> casted_video <- cast(melted_video,...~variable,sum)
> casted_video
> nrow(casted_video)
[1] 6
> ncol(casted_video)
[1] 19
"value"
```