Sinking of Korean naval ship 'CheonAn' mid point check session

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2019-04-24 19:21:25 수요일

- 설문 응답을 시각화할 수 있는 함수를 ggplot2를 이용해 미리 만듭니다.
- 만들어 놓은 패키지 'Survey Data Visualization.R'을 불러옵니다

```
library(RColorBrewer)
source("C:/Users/iihsk/Desktop/SeongJin Kim/9. Journalism/0.          &          R/0. Appendix/
```

```
## ######################## Survey Response Visualization ########################
## - Function 'pieChart' successfully loaded
## - Function 'stackedBarPlot' successfully loaded
## - Function 'choicePct' successfully loaded
```

```
data <- read.csv("      (Responses).csv", header=TRUE)
```

- 32번째 질문 "정부가 천안함 사건에 대한 북한의 책임있는 조치를 요구해야 합니까" 응답 결과를 시각화합니다

```
question32 <- data[,32]
question33 <- data[,33]
levels(question32)
```

```
## [1] "    "      "      " "   "
## [4] "    "      "      "
```

```
levels(question33) <- c("   ","      ","      ","    ","      ")
```

- 답변의 순서가 가나다순입니다. 원하는 대로 순서를 "매우 그렇지 않다 - 조금 그렇지 않다 - 보통이다 - 조금 그렇다 - 매우 그렇다"로 정렬합니다.

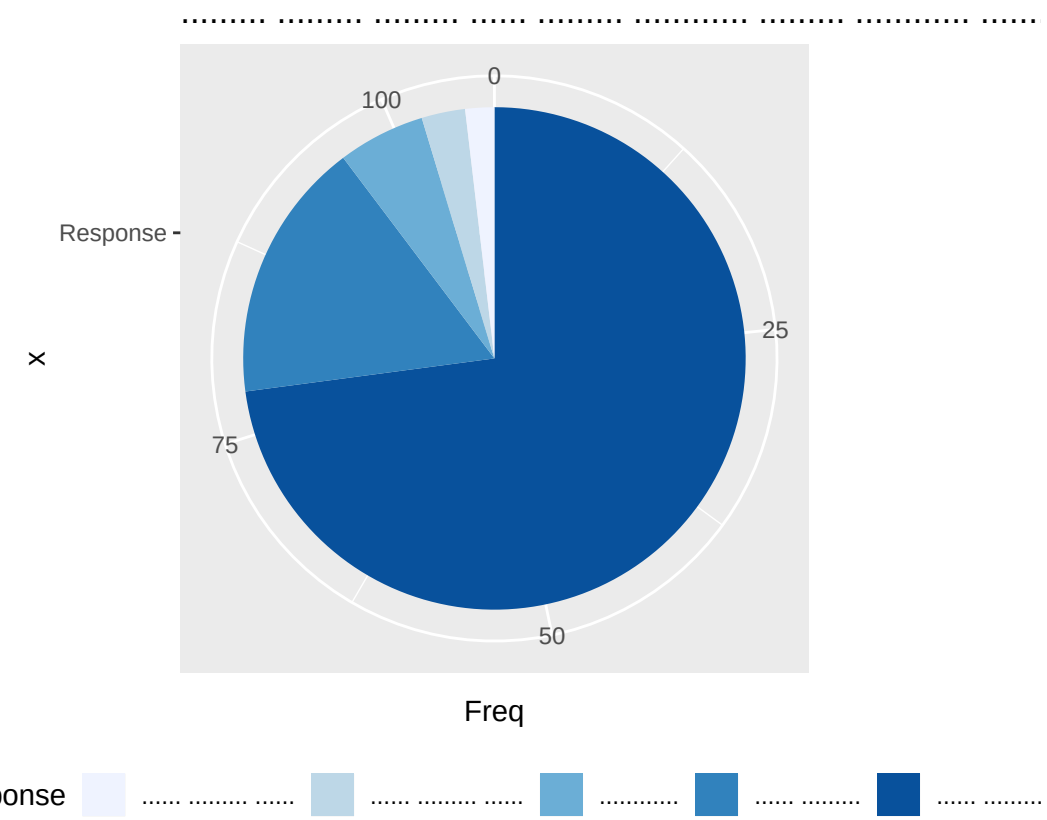
```
colnames(data)[32] <- "                          ?"
data[,32] <- factor(question32, levels=c("      ","      ","   ","    ","    "), ordered=TRUE)
colnames(data)[33] <- "                          "
data[,33] <- factor(question33, levels=c("    ","   ","      ","      ","      "), ordered=TRUE)
```

```
choicePct(data, 32:33)
```

```
## ----------------------------------------------------------------
##  n = 107 , p = 5
##  Question :                          ?
## Percentage(%) of         = 1.9 ( 2 responses)
## Percentage(%) of         = 2.8 ( 3 responses)
## Percentage(%) of     = 5.6 ( 6 responses)
## Percentage(%) of       = 16.8 ( 18 responses)
## Percentage(%) of       = 72.9 ( 78 responses)
## ----------------------------------------------------------------
##  n = 107 , p = 5
##  Question :
## Percentage(%) of      = 3.7 ( 4 responses)
## Percentage(%) of     = 6.5 ( 7 responses)
## Percentage(%) of         = 1.9 ( 2 responses)
## Percentage(%) of        = 41.1 ( 44 responses)
```

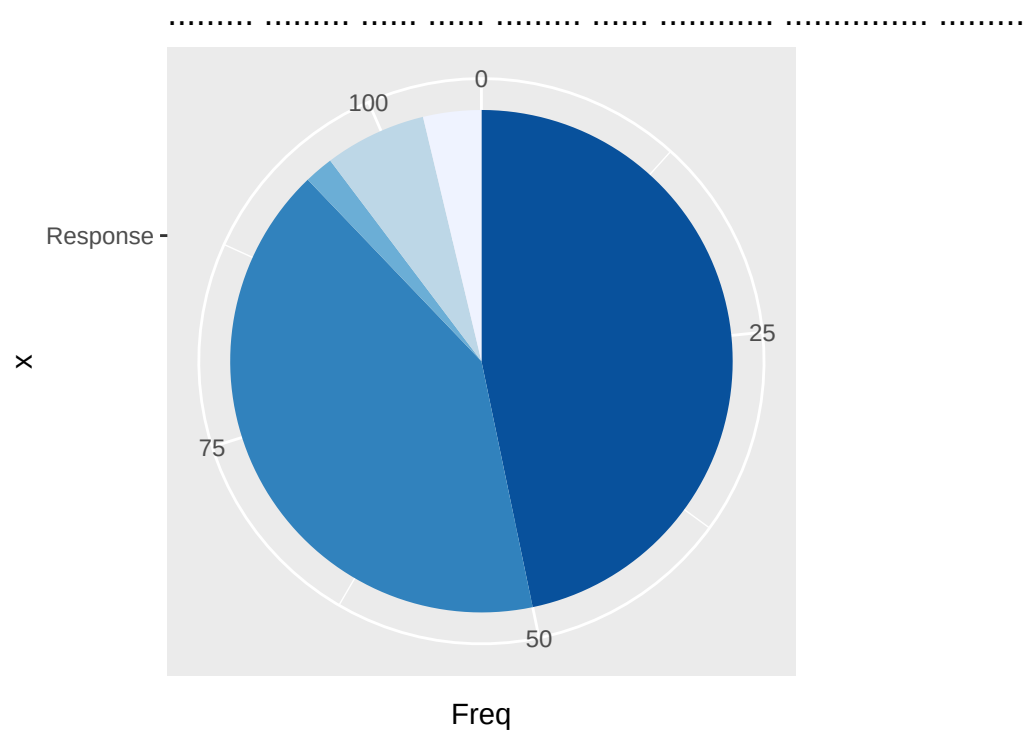
```
## Percentage(%) of         = 46.7 ( 50 responses)
```

```
pieChart(data, 32, "Blues")
```



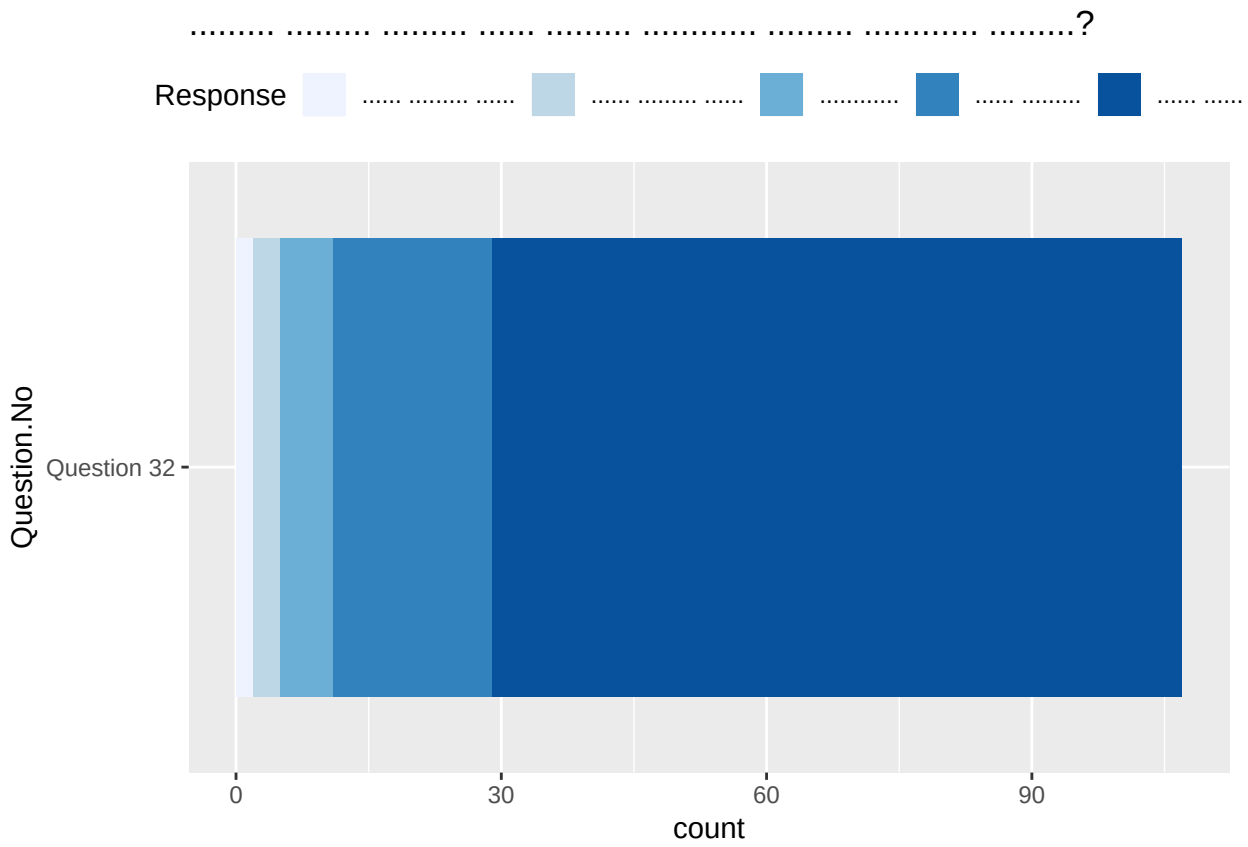
analysis-1.bb

```
pieChart(data, 33, "Blues")
```



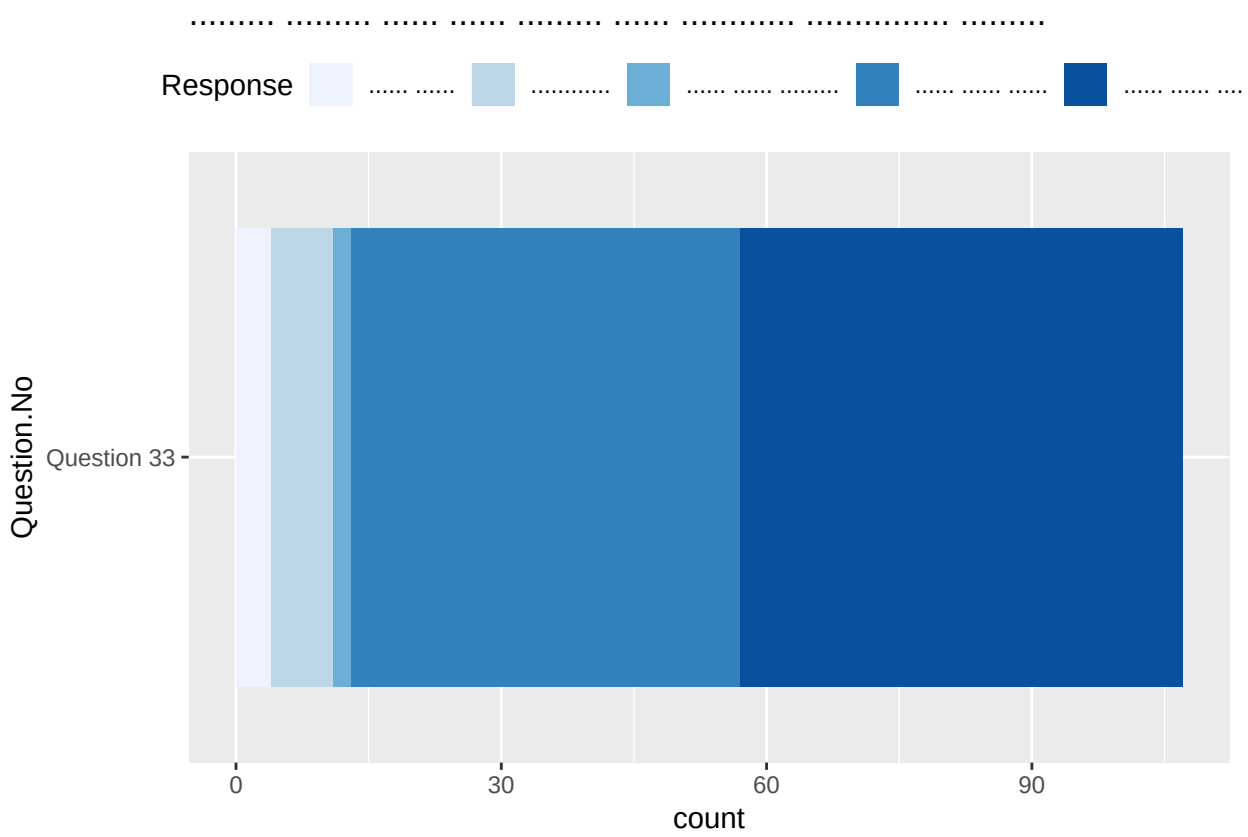
analysis-2.bb

```
stackedBarPlot(data, 32, col="Blues")
```



analysis-3.bb

```
stackedBarPlot(data, 33, col="Blues")
```



analysis-4.bb

2. 천안함 생존장병 사후 보상에 대한 질문

```
data2 <- data[,12:15]
for(i in 1:dim(data2)[2]){
  cat(levels(data2[,i]), paste(":",length(levels(data2[,i])),"levels",sep=" "),"\n")
}
```

```
##          : 4 levels
##          : 4 levels
##          : 4 levels
##          : 4 levels
```

```
#              4    .
levels(data2[,1])
```

```
## [1] ""          " "      "   " " "
```

레벨 중 빈칸이 있다. 몇번째 관측값이 빈칸인지 찾아본다

```
for(i in 1:dim(data2)[2]){
  cat(paste(sum(data2[,i]==levels(data2[,i])[1]),"obs :"),which(data2[,i]==levels(data2[,i])[1]),"\n")
}
```

```
## 9 obs : 7 20 26 40 42 44 49 51 68
## 9 obs : 7 20 26 40 42 44 49 51 68
## 9 obs : 7 20 26 40 42 44 49 51 68
## 9 obs : 7 20 26 40 42 44 49 51 68
```

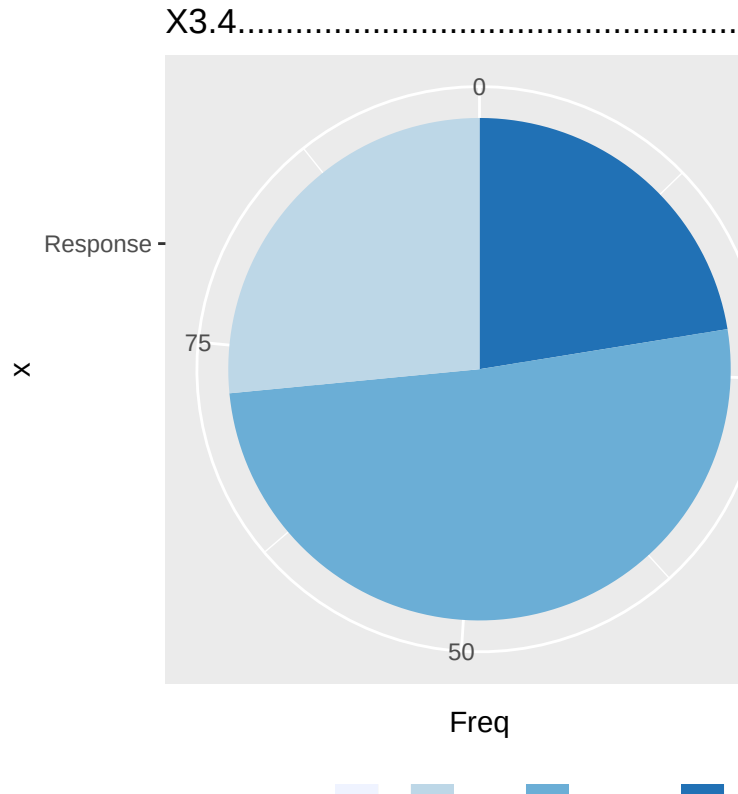
```
data2 <- data2[data2[,1]!=levels(data2[,1])[1],]
```

위의 9개 관측치는 생존장병에 관한 질문에 답하지 않았다. 앞선 필터 질문에서 걸러냈기 때문이다. 9개 NA를 시각화할 때 제외한다.

```
choicePct(data2, 1:4)
```

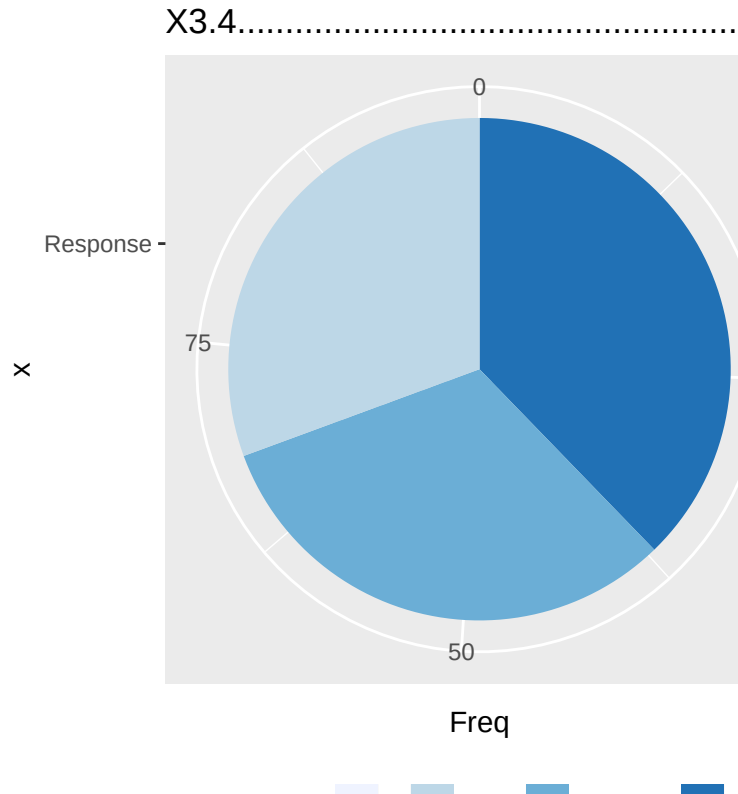
```
## ----------------------------------------------------------------
##  n = 98 , p = 3
##  Question :  X3.4.. . . . . . . . ... . ..1.. . .
## Percentage(%) of   = 0 ( 0 responses)
## Percentage(%) of    = 26.5 ( 26 responses)
## Percentage(%) of     = 51 ( 50 responses)
## Percentage(%) of    = 22.4 ( 22 responses)
## ----------------------------------------------------------------
##  n = 98 , p = 3
##  Question :  X3.4.. . . . . . . . ... . ..2.. . . . . . .
## Percentage(%) of   = 0 ( 0 responses)
## Percentage(%) of    = 30.6 ( 30 responses)
## Percentage(%) of     = 31.6 ( 31 responses)
## Percentage(%) of    = 37.8 ( 37 responses)
## ----------------------------------------------------------------
##  n = 98 , p = 3
##  Question :  X3.4.. . . . . . . . ... . ..3.. . . . . . . . ..
## Percentage(%) of   = 0 ( 0 responses)
## Percentage(%) of    = 32.7 ( 32 responses)
## Percentage(%) of     = 32.7 ( 32 responses)
## Percentage(%) of    = 34.7 ( 34 responses)
## ----------------------------------------------------------------
##  n = 98 , p = 3
##  Question :  X3.4.. . . . . . . . ... . ..4.. . . . . . .
## Percentage(%) of   = 0 ( 0 responses)
## Percentage(%) of    = 19.4 ( 19 responses)
## Percentage(%) of     = 48 ( 47 responses)
## Percentage(%) of    = 32.7 ( 32 responses)
```

```
pieChart(data2, 1, "Blues")
```



and figure percentage for each response-1.bb

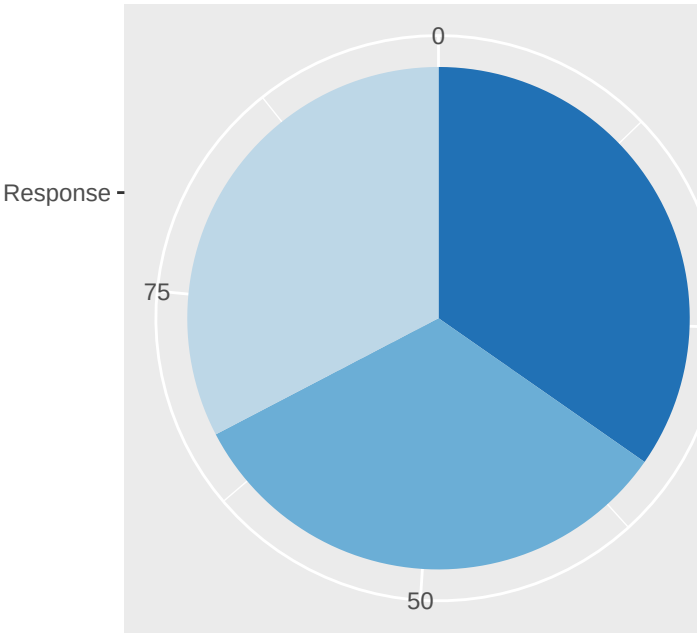
```
pieChart(data2, 2, "Blues")
```



and figure percentage for each response-2.bb

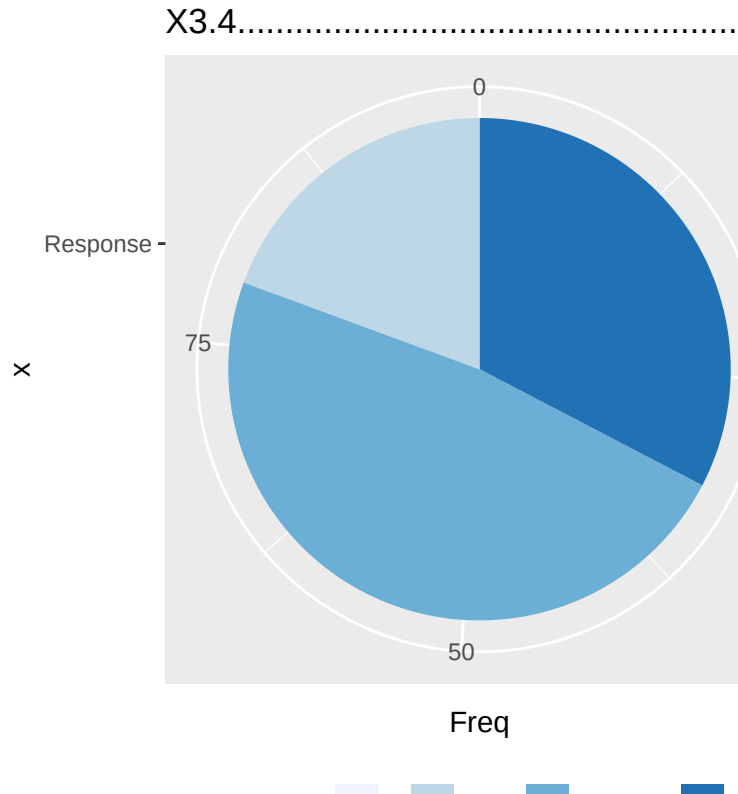
```
pieChart(data2, 3, "Blues")
```

X3.4.....



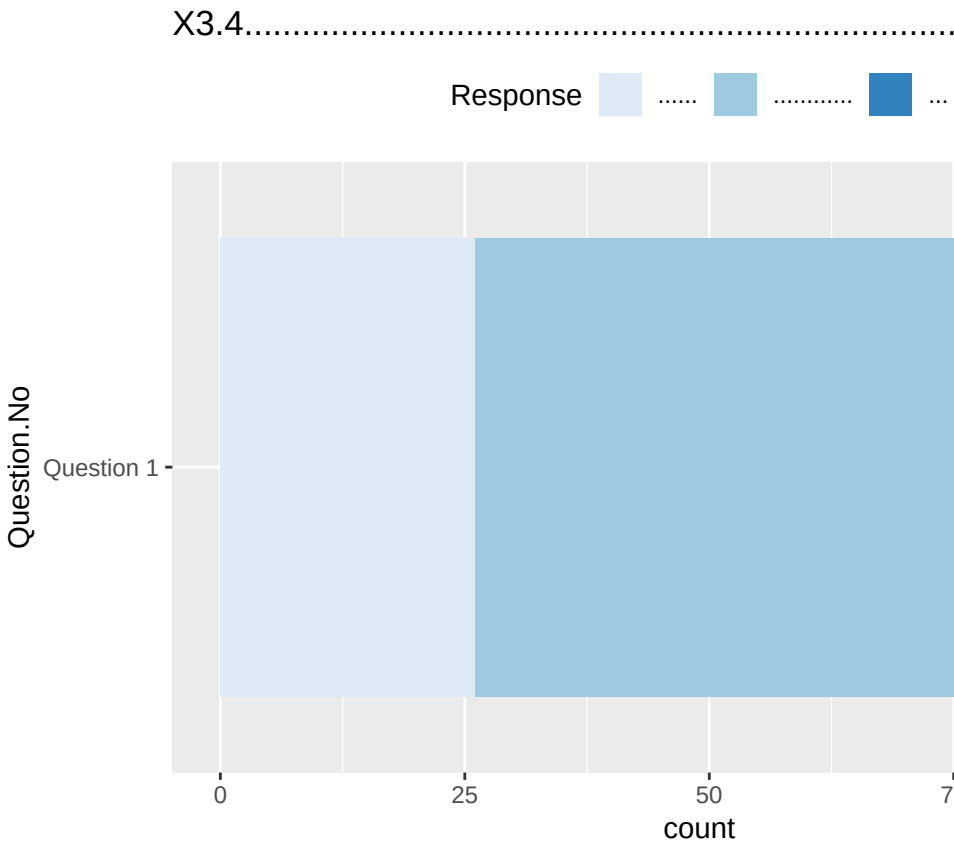
and figure percentage for each response-3.bb

```
pieChart(data2, 4, "Blues")
```



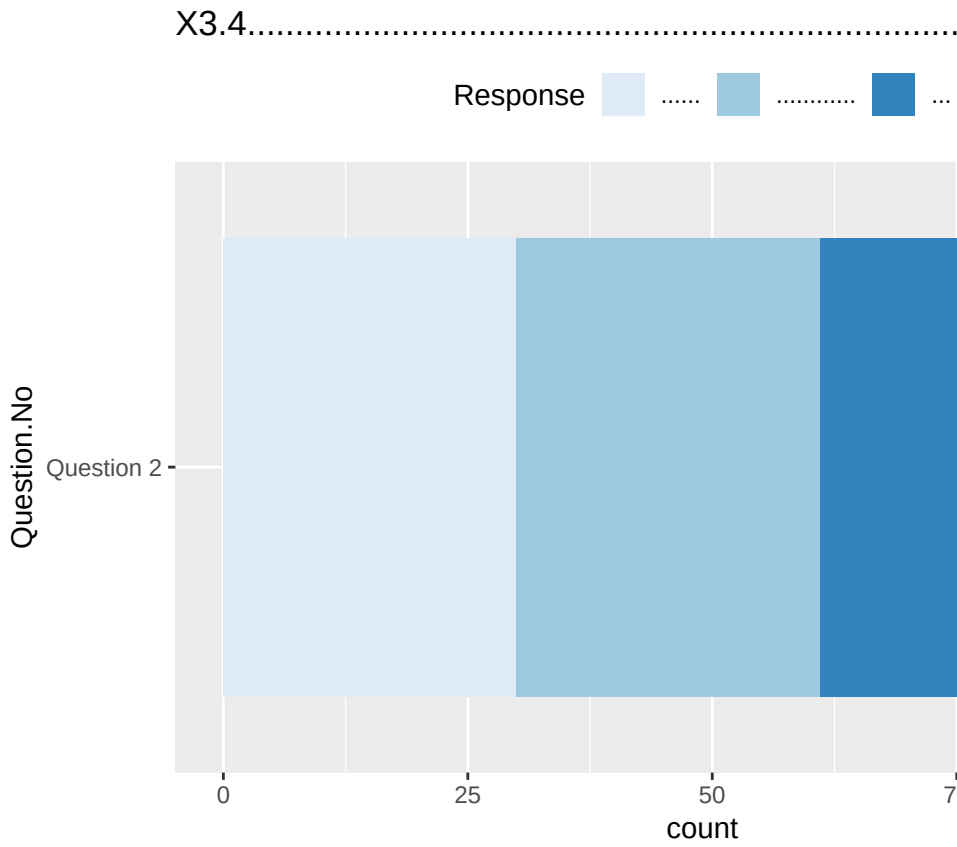
and figure percentage for each response-4.bb

```
stackedBarPlot(data2, 1, col="Blues")
```



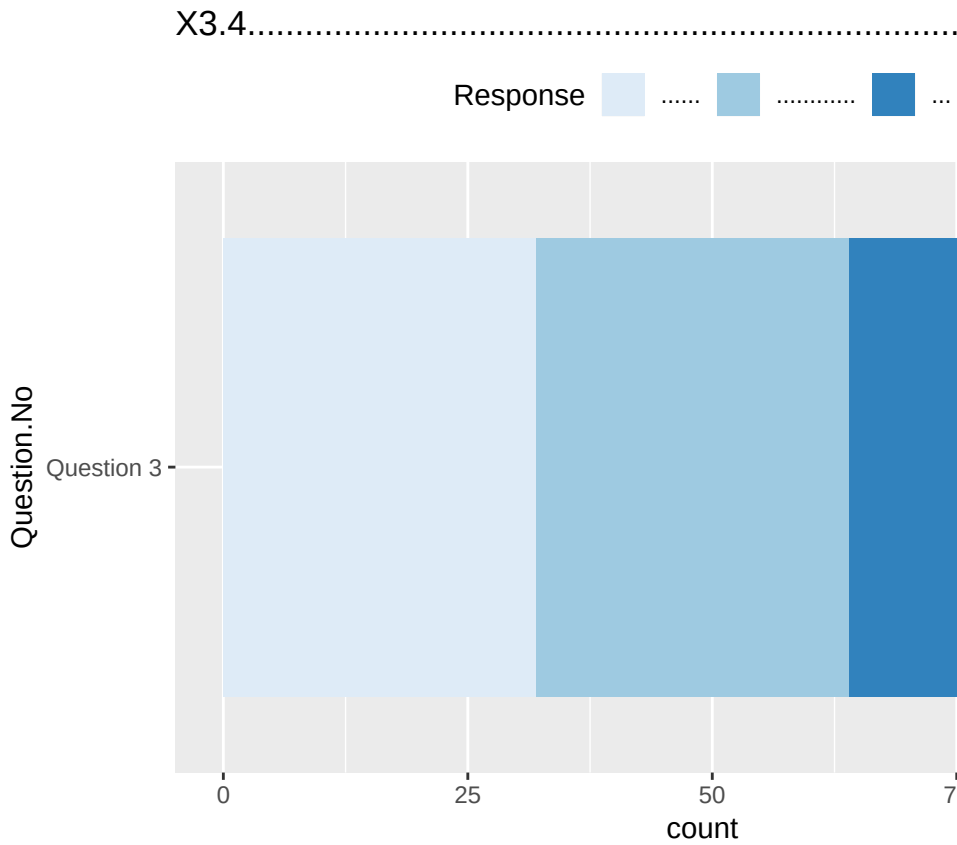
and figure percentage for each response-5.bb

```
stackedBarPlot(data2, 2, col="Blues")
```



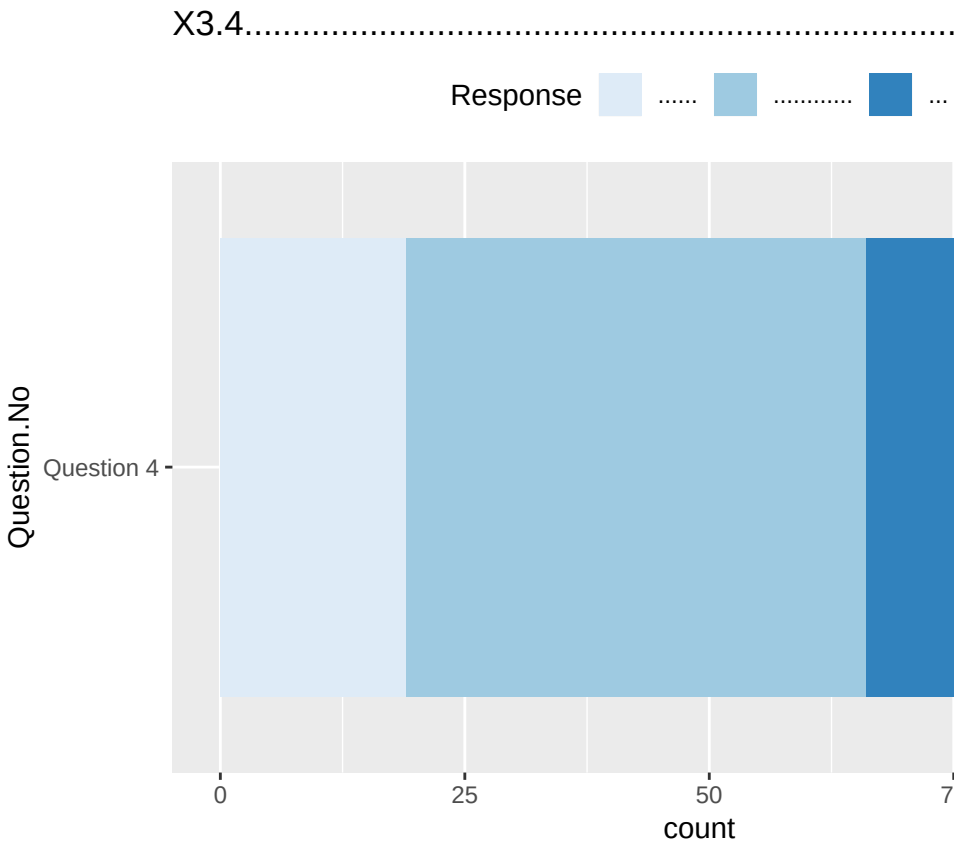
and figure percentage for each response-6.bb

```
stackedBarPlot(data2, 3, col="Blues")
```



and figure percentage for each response-7.bb

```
stackedBarPlot(data2, 4, col="Blues")
```



and figure percentage for each response-8.bb