

Lab-7

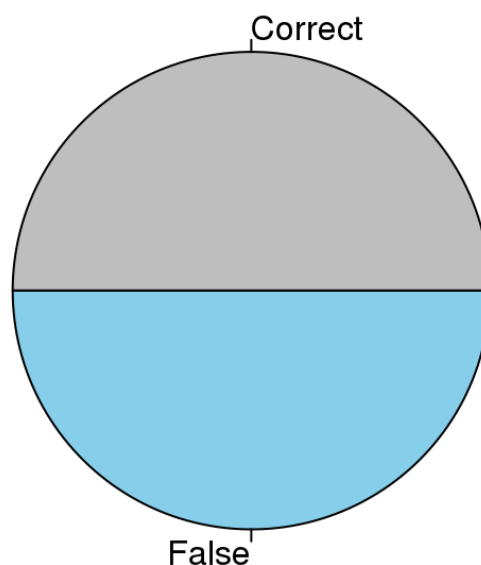
Test 1

```
test_1 <- read.csv("~/CS-261/Lab-7/Test-1.csv")
```

```
#Pie chart for correct predictions
```

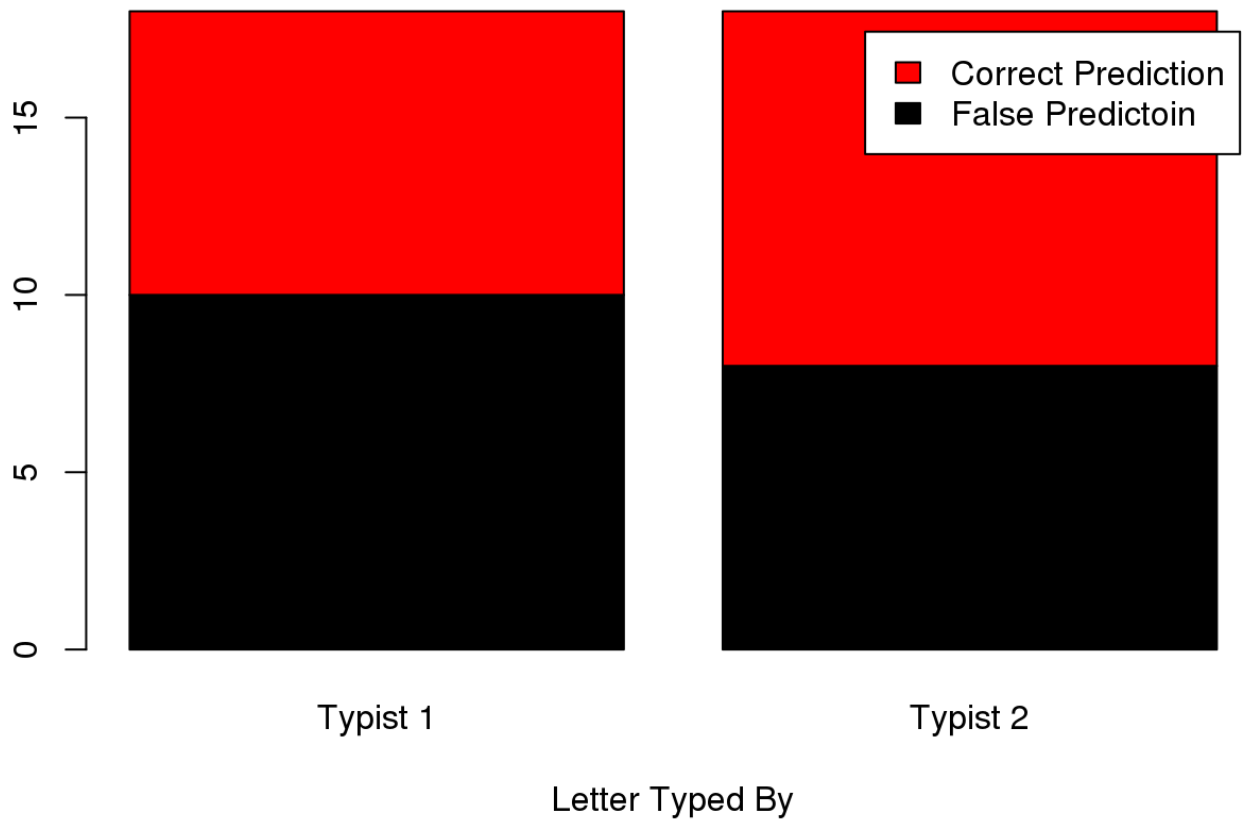
```
correct <- table(test_1$Correct.)["TRUE"]  
false <- table(test_1$Correct.)["FALSE"]  
slices <- c(correct, false)  
lbls <- c("Correct", "False")  
pie(slices, labels = lbls, main="Percent of Correct Prediction",col=c("grey", "sky  
blue"))
```

Percent of Correct Prediction



```
#Stacked BarChart
```

```
t1 <- table(test_1$Correct.*1,test_1$Letter.Typed.By)  
barplot(t1, names.arg=c("Typist 1", "Typist 2"), xlab="Letter Typed By",  
        legend = c("False Predictoin", "Correct Prediction"), col = c("black", "red"))
```



```
#One dimensional scatter plot for Test 1
```

```
library(dplyr)
```

```
##  
## Attaching package: 'dplyr'
```

```
## The following objects are masked from 'package:stats':  
##  
## filter, lag
```

```
## The following objects are masked from 'package:base':  
##  
## intersect, setdiff, setequal, union
```

```

xlim <- c(-2000,1500);
ylim <- c(0,20);

letters_from_1 <- filter(test_1, test_1$Letter.Typed.By == 1)
letters_from_2 <- filter(test_1, test_1$Letter.Typed.By == 2)

px_1 <- letters_from_1$Evidence
py_1 <- c(rep(2,length(px_1)))

px_2 <- letters_from_2$Evidence
py_2 <- c(rep(1,length(px_2)))

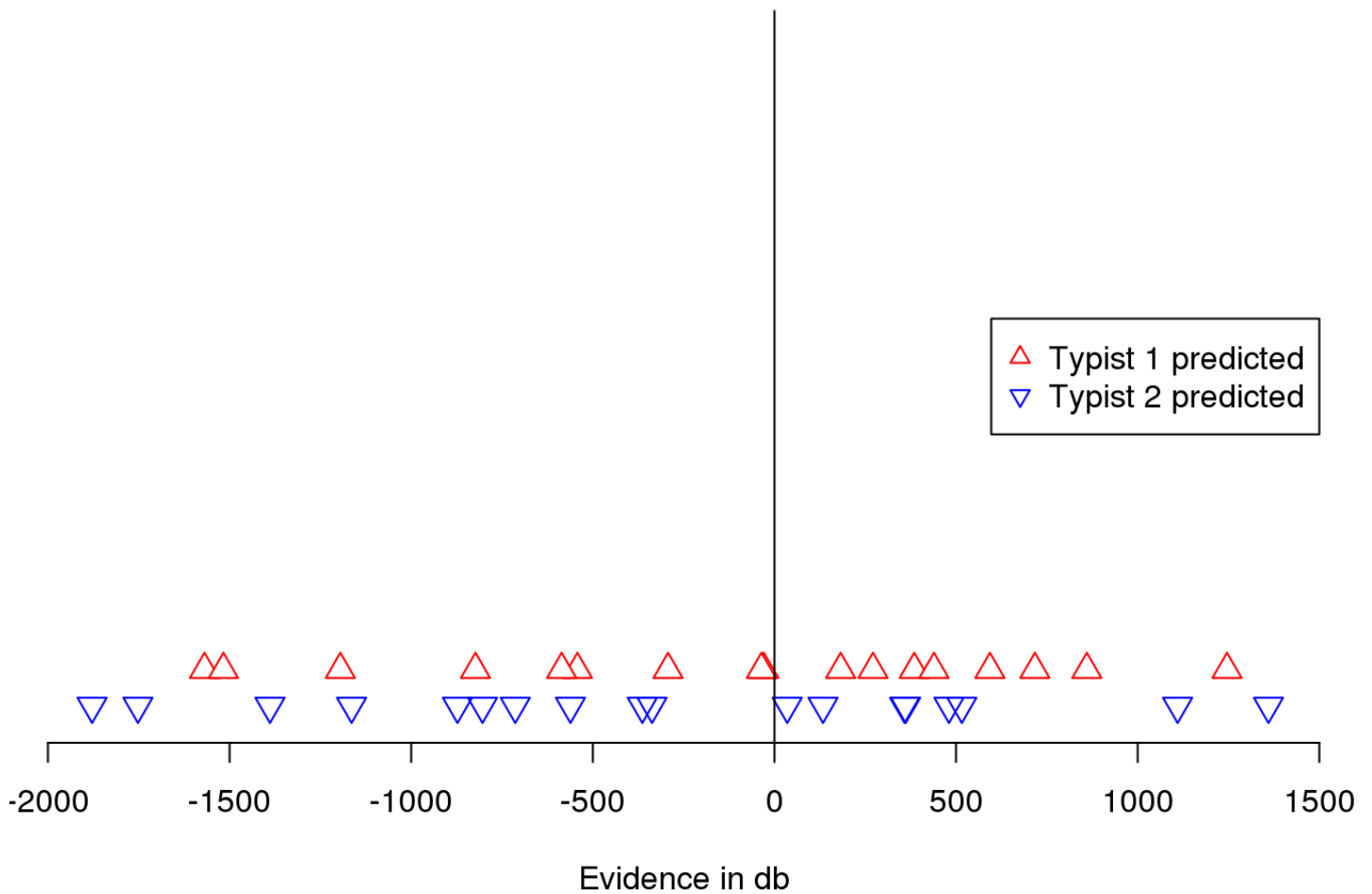
lx.buf <- 0;
lx <- seq(xlim[1]+lx.buf,xlim[2]-lx.buf,len=length(px_1));
ly <- 0;

## create basic plot outline
par(xaxs='i',yaxs='i',mar=c(5,1,1,1));
plot(NA,xlim=xlim,ylim=ylim,axes=F,ann=T, xlab = "Evidence in db");
axis(1);

## plot elements
points(px_1,py_1,pch=24,cex=1.5, col="red", bg = par("bg"))
points(px_2,py_2,pch=25,cex=1.5, col="blue")
abline(v=0)

legend("right",border = "white", legend = c("Typist 1 predicted","Typist 2 predicted"),
      pch = c(24,25), col = c("red","blue"),
      )

```



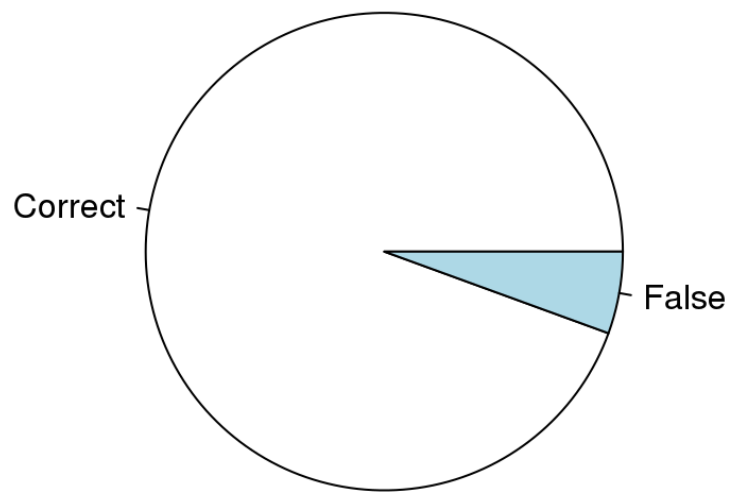
Test 2

```
test_2 <- read.csv("~/CS-261/Lab-7/Test-2.csv")
```

```
#Pie chart for correct predictions
```

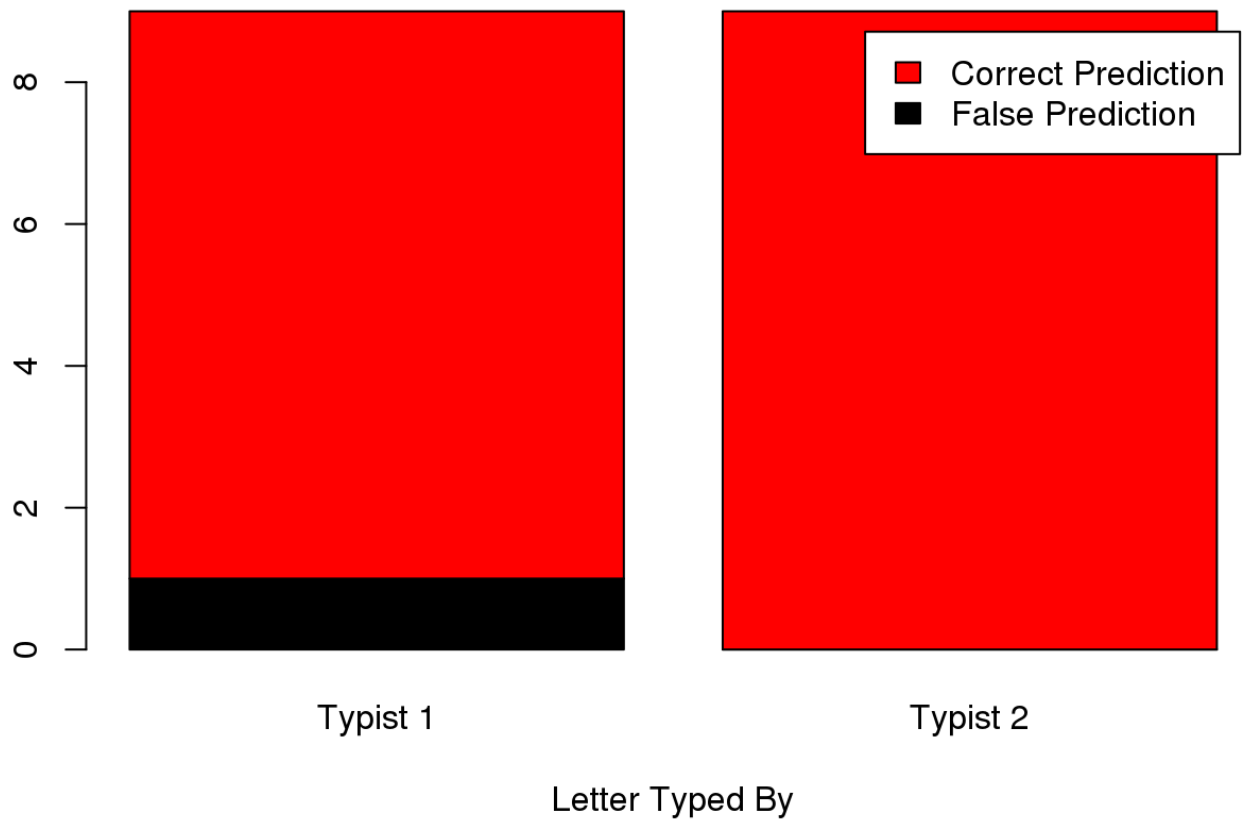
```
correct_2 <- table(test_2$Correct)["TRUE"]  
false_2 <- table(test_2$Correct)["FALSE"]  
slices_2 <- c(correct_2, false_2)  
lbls <- c("Correct", "False")  
pie(slices_2, labels = lbls, main="Percent of Correct Prediction for Test 2")
```

Percent of Correct Prediction for Test 2



#Stacked BarChart

```
t2 <- table(test_2$Correct*1, test_2$Letter.Typed.By)
barplot(t2, names.arg=c("Typist 1", "Typist 2"), xlab="Letter Typed By",
        legend = c("False Prediction", "Correct Prediction"), col = c("black", "red"))
```



```
#One dimensional scatter plot
```

```
xlim <- c(-1000,1000);
```

```
ylim <- c(0,20);
```

```
tbl <- table(test_2$Evidence,test_2$Letter.Typed.By)
```

```
px_1 <- test_2$Evidence[1:9];
```

```
py_1 <- c(rep(2,length(px_1)))
```

```
px_2 <- test_2$Evidence[10:18];
```

```
py_2 <- c(rep(1,length(px_2)))
```

```
lx.buf <- 0;
```

```
lx <- seq(xlim[1]+lx.buf,xlim[2]-lx.buf,len=length(px_1));
```

```
ly <- 0;
```

```
## create basic plot outline
```

```
par(xaxs='i',yaxs='i',mar=c(5,1,1,1));
```

```
plot(NA,xlim=xlim,ylim=ylim,axes=F,ann=T, xlab = "Evidence in db");
```

```
axis(1);
```

```
## plot elements
```

```
points(px_1,py_1,pch=24,cex=1.5, col="red", bg = par("bg"))
```

```
points(px_2,py_2,pch=25,cex=1.5, col="blue")
```

```
abline(v=0)
```

```
legend("right",border = "white", legend = c("Typist 1 predicted","Typist 2 predict  
ed"),
```

```
pch = c(24,25), col = c("red","blue"),
```

```
)
```

