

# HW2B.R

Frank

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#  
# STAT 230/530 Homework 2B NAME: <<<< Dingjue Ji dj333>>>>  
#  
# Due Wednesday, September 21, 1 PM. Compile, print, and staple  
#####  
  
x<-data.frame(Y1=rbinom(n = 10000, size=1950, prob = 0.7),  
              Y2=rbinom(n = 10000, size=1950, prob = 0.7))  
ans1<-apply(x, 1, diff)/1950  
q<-quantile(ans1,c(0.025,0.975))  
breaks<-hist(ans1,breaks=100, plot=FALSE)$breaks  
#Blue area: 95%  
#Yellow area: 5%  
#Green line: 2.5% and 97.5% quantile  
#Red line: 1% difference  
histo<-hist(ans1, freq=FALSE, xlab='Rates Difference', breaks=100,  
            main='Histogram of Difference',  
            col=ifelse(breaks>=q[2] | breaks<=q[1], 'yellow', 'blue'))  
abline(v=quantile(ans1,c(0.025,0.975)), col='darkgreen')  
abline(v=0.01, col='Brown1')
```

