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**STAT 3500**  
**Introduction to Statistics**

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**Project 2**

Name: Jeremy Stark -----

Complete the following tables with the results of your simulations and turn this page in with a copy of your R code.

<b>GAME 1</b>					$P(\text{Win}) =$
#of Plays n=	# Losses	# Wins	Cumulative # of plays	Cumulative # of Wins	Relative Frequency of Wins
100	80	20	100	20	0.2
200	162	38	300	58	.29
400	333	67	700	125	.3125
500	427	74	1200	199	.398
800	666	134	2000	333	.41625
1000	846	154	3000	487	.487

<b>GAME 2</b>					$P(\text{Win}) =$
#of Plays n=	# Losses	# Wins	Cumulative # of plays	Cumulative # of Wins	Relative Frequency of Wins
100	42	58	100	58	0.58
200	106	94	300	152	.507
400	183	217	700	369	.527
500	253	247	1200	616	.513
800	370	430	2000	1046	.523
1000	474	526	3000	1572	.524

<b>GAME 3</b>					$P(\text{Win}) =$
#of Plays n=	# Losses	# Wins	Cumulative # of plays	Cumulative # of Wins	Relative Frequency of Wins
100	51	49	100	49	0.49
200	105	95	300	144	.4800
400	202	198	700	342	.4886
500	263	237	1200	579	.4825
800	414	386	2000	965	.4825
1000	499	501	3000	1466	.4887

# Project\_\_2\_\_stark.R

*jeremystark*

*Wed Feb 6 07:59:46 2019*

```
#Game 1
xx<-rbinom(n=200, 1, 1/6)
table (xx==1)
```

```
##
## FALSE TRUE
## 168 32
```

```
xx<-rbinom(n=400, 1, 1/6)
table (xx==1)
```

```
##
## FALSE TRUE
## 326 74
```

```
xx<-rbinom(n=500, 1, 1/6)
table (xx==1)
```

```
##
## FALSE TRUE
## 414 86
```

```
xx<-rbinom(n=800, 1, 1/6)
table (xx==1)
```

```
##
## FALSE TRUE
## 666 134
```

```
xx<-rbinom(n=1000, 1, 1/6)
table (xx==1)
```

```
##
## FALSE TRUE
## 821 179
```

```
#Game 2
xx<-rbinom(n=200, 4, 1/6)
table(xx>0)
```

```
##
## FALSE TRUE
## 96 104
```

```
xx<-rbinom(n=400, 4, 1/6)
table(xx>0)
```

```
##
## FALSE TRUE
## 194 206
```

```
xx<-rbinom(n=500, 4, 1/6)
table(xx>0)
```

```
##  
## FALSE TRUE  
## 237 263
```

```
xx<-rbinom(n=800, 4, 1/6)  
table(xx>0)
```

```
##  
## FALSE TRUE  
## 396 404
```

```
xx<-rbinom(n=1000, 4, 1/6)  
table(xx>0)
```

```
##  
## FALSE TRUE  
## 470 530
```

```
#Game 3  
xx<-rbinom(n=200, 24, 1/36)  
table(xx>0)
```

```
##  
## FALSE TRUE  
## 90 110  
xx<-rbinom(n=400, 24, 1/36)  
table(xx>0)
```

```
##  
## FALSE TRUE  
## 231 169  
xx<-rbinom(n=500, 24, 1/36)  
table(xx>0)
```

```
##  
## FALSE TRUE  
## 256 244  
xx<-rbinom(n=800, 24, 1/36)  
table(xx>0)
```

```
##  
## FALSE TRUE  
## 399 401  
xx<-rbinom(n=1000, 24, 1/36)  
table(xx>0)
```

```
##  
## FALSE TRUE  
## 484 516
```