

# Central\_Limit\_Theorem

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2023-03-14

## Solution of question 1

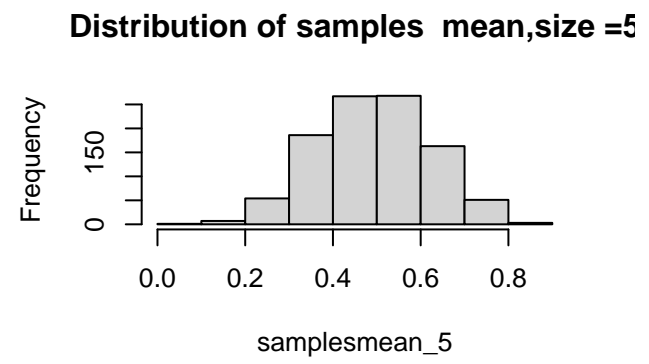
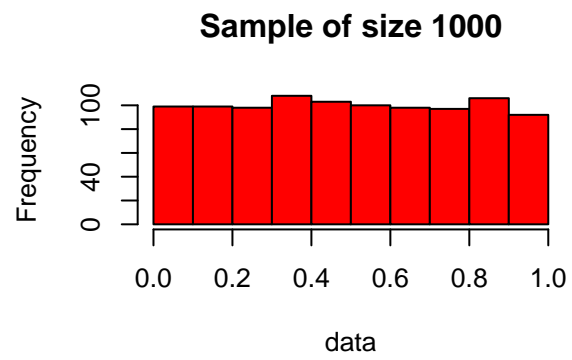
```
# echo=FALSE to prevent codes
set.seed(123)
par(mfrow=c(2,2))

# Lets draw sample of size 1000 from exponential distribution
data=runif(n=1000, min=0, max=1)

# Histogram of the data
hist(data, col="red", main="Sample of size 1000")

# Create a empty vector to keep the sample mean
samplesmean_5<-c()

# Take 1000 random sample with size 2 from the population
n=1000
for(i in 1:1000){
  samplesmean_5[i]=mean(sample(data, 5, replace=TRUE))
}
print(samplesmean_5)
hist(samplesmean_5, main="Distribution of samples mean,size =5")
```



Write yours commends here

## Solution of question 2