

## R Code for Practical 1

```
##### Q 1#####  
rm(list=ls(all=TRUE))# Remove the saved variables.  
x<-(1995:2000)  
x  
y<-c(15,25,37,28,26,26.6)  
y  
barplot(y, main="Bar Plot",xlab="Years",ylab="Annual sales(in lakhs)",  
names=c("1995","1996","1997","1998","1999","2000"))  
  
##### Q2#####  
rm(list=ls(all=TRUE))# Remove the saved variables.  
x<-c(3,4,1,1,3,4,3,3,1,3,2,1,2,1,2,3,2,3,1,1,1,1,4,3,1)  
length(x)  
y=table(x)## frequency table  
y  
par(mfrow=c(2,1))### for plotting two graphs on same page  
barplot(y, main="Bar Plot for frequencies",xlab="Product",ylab="Frequency",  
names=c("Limca", "Cocacola", "Pepsi", "Fanta"),col="green")  
barplot(y/length(x), main="Bar Plot for proportions",xlab="Product",ylab="Frequency",  
names=c("Limca", "Cocacola", "Pepsi", "Fanta"),col="green")  
  
##### Q3 #####  
rm(list=ls(all=TRUE))# Remove the saved variables.  
x<-c(6256,7108,2568,560,763)  
names(x)<-c("Excise", "Customs", "Corporation", "Income", "Other")  
pie(x,main="Pie Chart",col=c("blue", "green", "red", "black", "brown"))
```

```
##### Q4 #####
```

```
rm(list=ls(all=TRUE))# Remove the saved variables.
```

```
x<-c(1,2,3,4,5,6)
```

```
n=100
```

```
p=c(1/6,1/6,1/6,1/6,1/6,1/6)
```

```
p
```

```
#p=c(rep(1/6,6))
```

```
#p
```

```
y=sample(x,n,replace=T,prob=p)
```

```
y
```

```
z=table(y)
```

```
z
```

```
##### Q5 #####
```

```
rm(list=ls(all=TRUE))# Remove the saved variables.
```

```
x<-c(42,37,46,48,63,64,63,53,57,55,72,55,54,33,48,56,34,77,65,58,47,59,  
44,35,75,40,45,56,55,65,48,56,52,53,34,42,58,65,43,54,46,57,62,58,53,43,  
47,54,60,48)
```

```
n=length(x)
```

```
n
```

```
k=1+1.332*log(n)#### no. of classes
```

```
k
```

```
LL=min(x)
```

```
LL
```

```
UL=max(x)
```

```
UL
```

```
cw=8
```

```
i=0:6
```

```
ci=32+(i*8)
ci
z=cut(x,ci)
f<-table(z)
f
mv=c()### empty vector to store mid values
for(j in 1:6)
{
mv[j]=(ci[j]+ci[j+1])/2
}
mv

#####
rm(list=ls(all=TRUE))# Remove the saved variables.
x=c(0,1,2,3,4)
f=c(6,28,36,25,5)
d<-data.frame(x,f)
d
plot(x,f,type="b",col="blue",pch=3,lwd=4)
```