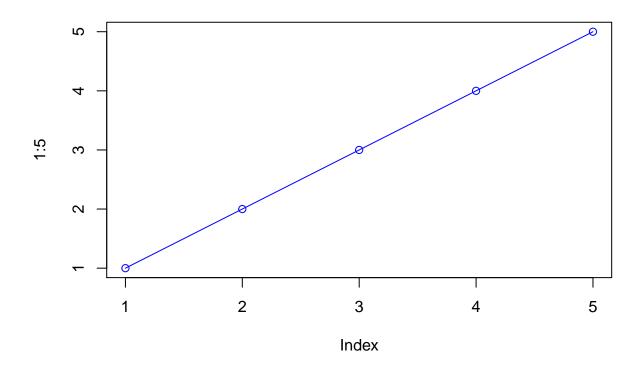
Class 5: Data visualization and graphics in R

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```
#Class 5
#Data visualization and graphics in R

#GRAPH 1: practice plot
plot(1:5, col="blue", typ="o")
```



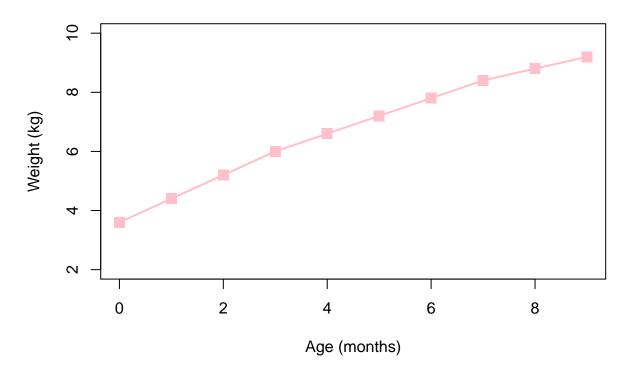
```
#following the lecture exercise
#set WD to lecture_5
setwd("C:/Users/hitif/Desktop/R_Shiny_Things/lecture_5")

#read table for weight_chart
weight <- read.table("bimm143_05_rstats/weight_chart.txt", header = TRUE)

#GRAPH 2: HOW TO MAKE A LINE PLOT
#change the scatterplot produced to a line plot</pre>
```

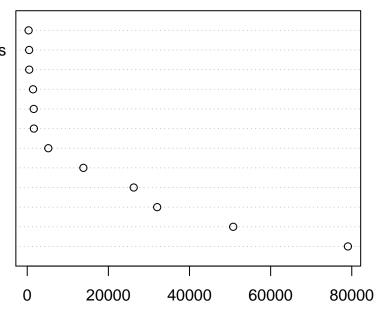
```
#pch = point type
#cex = point size
#lwd = line density
#ylim = limit the y-axis
#xlab = x-axis label
#ylab = y-axis label
#main = title
#col = pink
plot(weight$Age, weight$Weight, typ="o", pch=15, cex=1.5, lwd=2, ylim=c(2,10), xlab = "Age (months)", y
```

## Baby weight with age



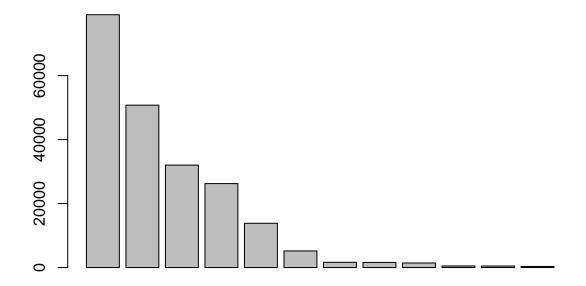
```
#sep="\t" SEPARATE BY TAB!!!! to include the row names
mouse <- read.table("bimm143_05_rstats/feature_counts.txt", header = TRUE, sep="\t")
#GRAPH 3: DotChart(X, labels)
dotchart(mouse$Count, labels = mouse$Feature)</pre>
```

Ribosomal RNAs Immunoglobulin Segments Miscellaneous RNA Small nuclear RNAs Small nucleolar RNAs Micro-RNAs Pseudogenes CpG islands Transfer RNAs Genes Coding Sequences



#GRAPH 4: barplot basic
barplot(mouse\$Count)

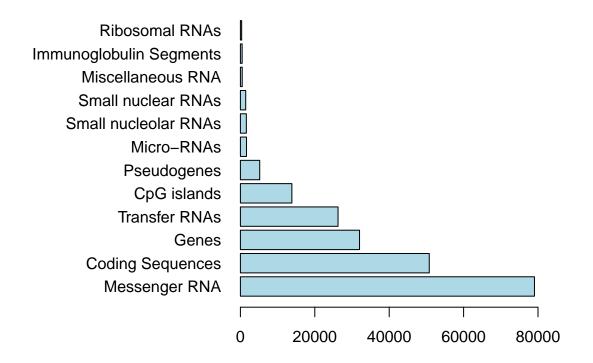
Messenger RNA



```
#make changes
#PAR (bottom, left, top, right)
par(mar=c(4, 12, 3, 5))

#GRAPH 5: BARPLOT pretty
barplot(mouse$Count, horiz= TRUE, names.arg = mouse$Feature, main = "# of features in the mouse GRCm38 )
```

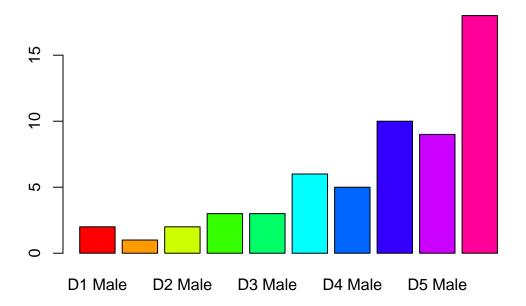
## # of features in the mouse GRCm38 genome



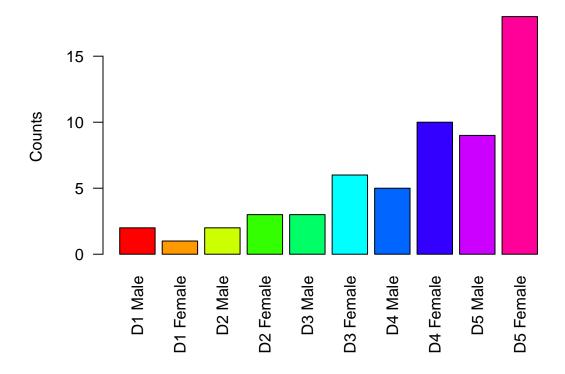
```
#Providing Color Vectors!
mfcount <- read.delim("bimm143_05_rstats/male_female_counts.txt")

#change the margins!
par(mar=c(7,5,3,4))

#GRAPH 6: hard code the number of rainbows
barplot(mfcount$Count, names.arg = mfcount$Sample, col=rainbow(10))</pre>
```



```
#GRAPH 7: code the number of rainbows by 'nrows'
barplot(mfcount$Count, names.arg = mfcount$Sample, col=rainbow(nrow(mfcount)), las=2, ylab = "Counts")
```



#GRAPH 8: code by every other color (list them)
barplot(mfcount\$Count, names.arg = mfcount\$Sample, col=c("pink", "blue"), las=2, ylab = "Counts")

