

Q2

Exercise 26 on page 24. Note the graph is more commonly called a bar graph/chart/plot instead of a histogram.

Question 2

Bins = J = joint swelling
 F = Fatigue
 B = Back pain
 M = muscle weakness
 C = coughing
 N = nose running
 O = other

Bins	Frequency	Relative Frequency
J	10	$\frac{10}{60} = 0.1670$
F	9	$\frac{9}{60} = 0.1500$
B	7	$\frac{7}{60} = 0.1167$
M	4	$\frac{4}{60} = 0.0667$
C	3	$\frac{3}{60} = 0.0500$
N	6	$\frac{6}{60} = 0.1000$
O	21	$\frac{21}{60} = 0.3500$
	60	1

Code for 2:

```
# question 2
```

```
physEffects = c("O", "O", "N", "J", "C", "F", "B", "B", "F", "O", "J", "O", "O", "M",
  "O", "F", "F", "O", "O", "N", "O", "N", "J", "F", "J", "B", "O", "C",
  "J", "O", "J", "J", "F", "N", "O", "B", "M", "O", "J", "M", "O", "B",
  "O", "F", "J", "O", "O", "B", "N", "C", "O", "O", "O", "M", "B", "F",
  "J", "O", "F", "N")
```

```
physEffectsTable = table(physEffects)
```

```
physEffectsTable
```

```
# create histogram from table
```

```
physEffectsHistogram = barplot(physEffectsTable/60, space = 0, col = "blue", xlab = "Health complaint", ylab = "Relative Frequency", main = "Phycological Effects of Work stress and pesticide Exposure")
```

Histogram:

