Lab_1.R

r3382487

2025-09-10

```
##### PSY 503
##### Lab_1
##### Diana Kim



### 1 ###
install.packages("coursekata")
```

```
## Installing package into '/cloud/lib/x86_64-pc-linux-gnu-library/4.5'
## (as 'lib' is unspecified)
```

```
install.packages("tidyverse")
```

```
## Installing package into '/cloud/lib/x86_64-pc-linux-gnu-library/4.5'
## (as 'lib' is unspecified)
```

```
install.packages("datasauRus")
```

```
## Installing package into '/cloud/lib/x86_64-pc-linux-gnu-library/4.5'
## (as 'lib' is unspecified)
```

```
library(coursekata)
```

```
## Registered S3 method overwritten by 'mosaic':
##   method                           from
##   fortify.SpatialPolygonsDataFrame ggplot2

## Loading required package: dslabs

## Loading required package: Lock5withR

## Loading required package: fivethirtyeightdata

## Loading required package: fivethirtyeight

## Loading required package: Metrics

## Loading required package: lsr

## Loading required package: mosaic

##
## The 'mosaic' package masks several functions from core packages in order to add
## additional features.  The original behavior of these functions should not be affected by this.

##
## Attaching package: 'mosaic'

## The following objects are masked from 'package:dplyr':
##
```

```
##     count, do, tally

## The following object is masked from 'package:Matrix':
##
##     mean

## The following object is masked from 'package:ggplot2':
##
##     stat

## The following objects are masked from 'package:stats':
##
##     binom.test, cor, cor.test, cov, fivenum, IQR, median, prop.test,
##     quantile, sd, t.test, var

## The following objects are masked from 'package:base':
##
##     max, mean, min, prod, range, sample, sum

## Loading required package: supernova

## -- CourseKata packages ------------------------------------ coursekata 0.19.0 --
## v dslabs               0.8.0       v Metrics             0.1.4
## v Lock5withR           1.2.2       v lsr                 0.5.2
## v fivethirtyeightdata 0.1.0       v mosaic              1.9.2
## v fivethirtyeight     0.6.2       v supernova           3.0.0
##
## Attaching package: 'coursekata'
##
##
## The following object is masked from 'package:datasets':
##
##     penguins
```

```r
library(tidyverse)
```

```
## -- Attaching core tidyverse packages ------------------------ tidyverse 2.0.0 --
## v forcats   1.0.0     v stringr   1.5.2
## v lubridate 1.9.4     v tibble    3.3.0
## v purrr     1.1.0     v tidyr     1.3.1
## v readr     2.1.5
## -- Conflicts ------------------------------------------ tidyverse_conflicts() --
## x mosaic::count() masks dplyr::count()
## x purrr::cross()  masks mosaic::cross()
## x mosaic::do()    masks dplyr::do()
## x tidyr::expand() masks Matrix::expand()
## x dplyr::filter() masks stats::filter()
## x dplyr::lag()    masks stats::lag()
## x tidyr::pack()   masks Matrix::pack()
## x mosaic::stat()  masks ggplot2::stat()
## x mosaic::tally() masks dplyr::tally()
## x tidyr::unpack() masks Matrix::unpack()
## i Use the conflicted package (<http://conflicted.r-lib.org/>) to force all conflicts to become errors
```

```r
library(datasauRus)
```

```r
### 2 ###
lab1_data <- datasaurus_dozen
str(lab1_data)
```

```
## tibble [1,846 x 3] (S3: tbl_df/tbl/data.frame)
##  $ dataset: chr [1:1846] "dino" "dino" "dino" "dino" ...
##  $ x      : num [1:1846] 55.4 51.5 46.2 42.8 40.8 ...
##  $ y      : num [1:1846] 97.2 96 94.5 91.4 88.3 ...
##  - attr(*, "spec")=
##   .. cols(
##   ..   dataset = col_character(),
##   ..   x = col_double(),
##   ..   y = col_double()
##   .. )
```

```r
# what are these...??
# 'dataset' column shows nominal values, and the other two are probably intervals..??
# ohhhh I figure it out after plotting the dots. They are coordinates of different shapes!!
# so x and y coordinates should be ratio variables I guess

print(lab1_data$dataset)
```

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## [1136] "dots"       "circle"     "circle"     "circle"     "circle"
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## [1271] "circle"     "circle"     "circle"     "circle"     "circle"
## [1276] "circle"     "circle"     "circle"     "bullseye"   "bullseye"
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## [1786] "wide_lines" "wide_lines" "wide_lines" "wide_lines" "wide_lines"
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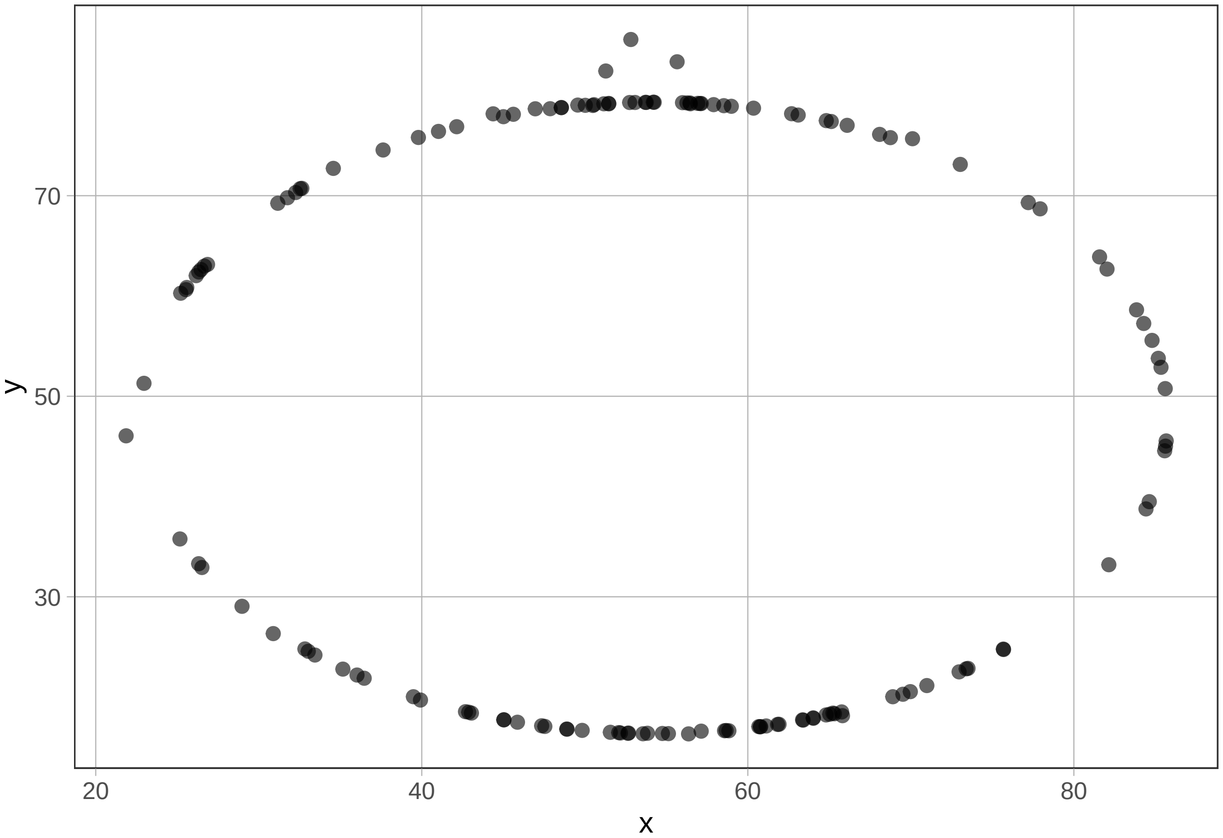
## [1836] "wide_lines" "wide_lines" "wide_lines" "wide_lines" "wide_lines"
## [1841] "wide_lines" "wide_lines" "wide_lines" "wide_lines" "wide_lines"
## [1846] "wide_lines"
```

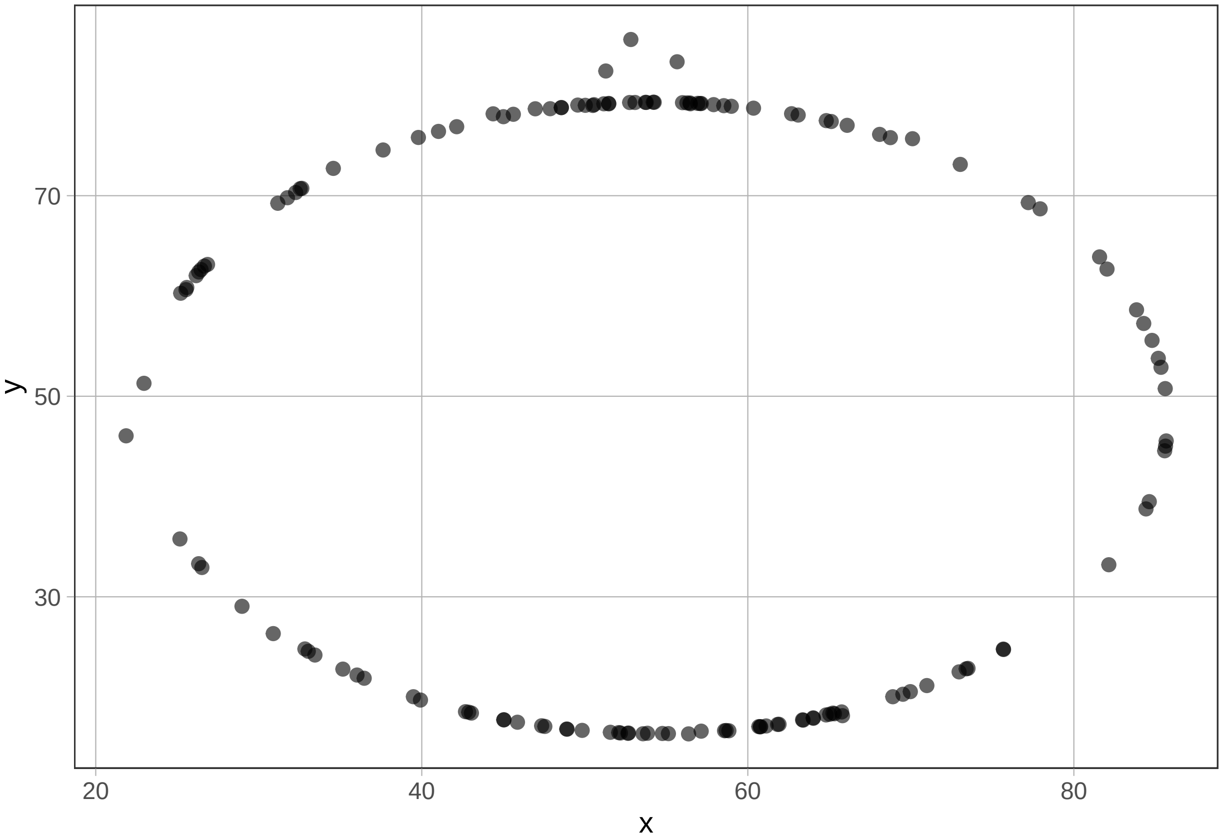
```r
print(unique(lab1_data$dataset))
```

```
##  [1] "dino"       "away"       "h_lines"    "v_lines"    "x_shape"
##  [6] "star"       "high_lines" "dots"       "circle"     "bullseye"
## [11] "slant_up"   "slant_down" "wide_lines"
```

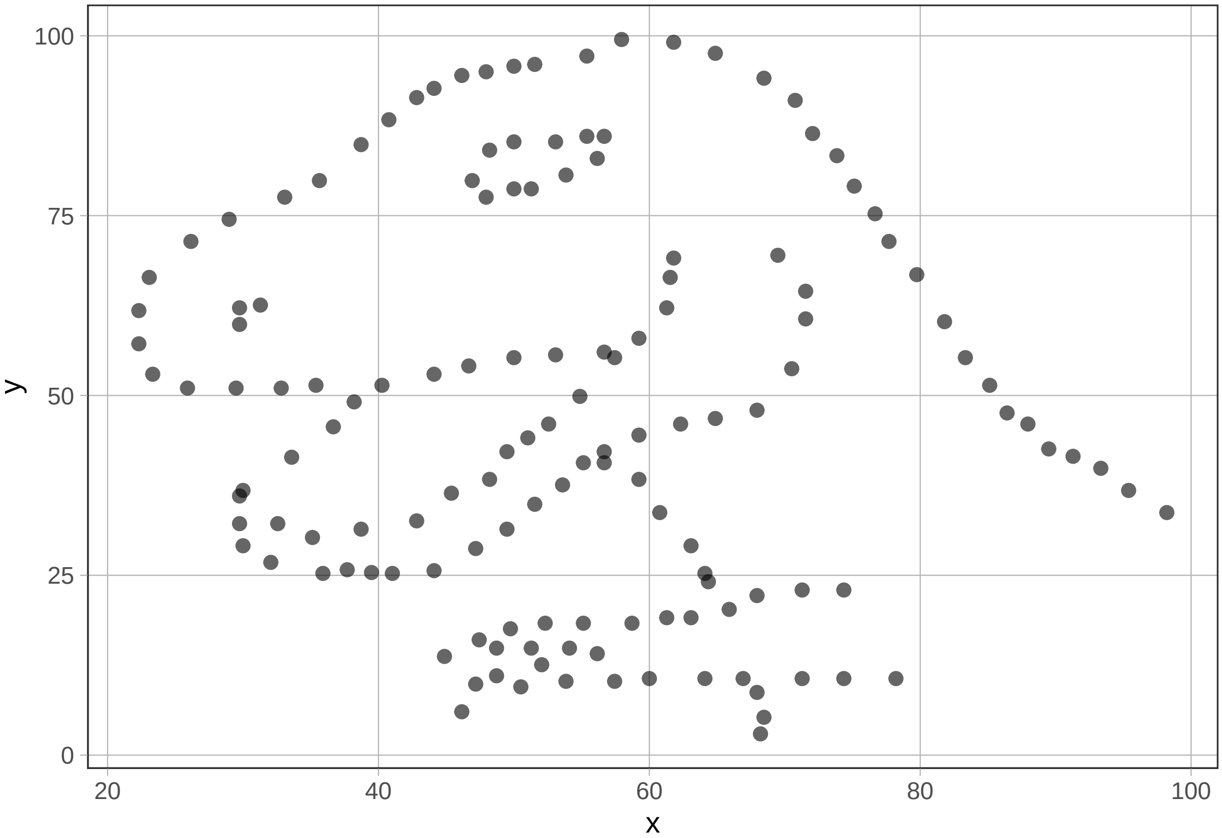
```r
# it's printing only the unique values in 'dataset' column



### 3 ###
#library(ggplot2)
temp_data <- lab1_data %>%
  filter(dataset == "circle")

ggplot(data = temp_data, aes(x = x, y = y)) +
  geom_point()
```



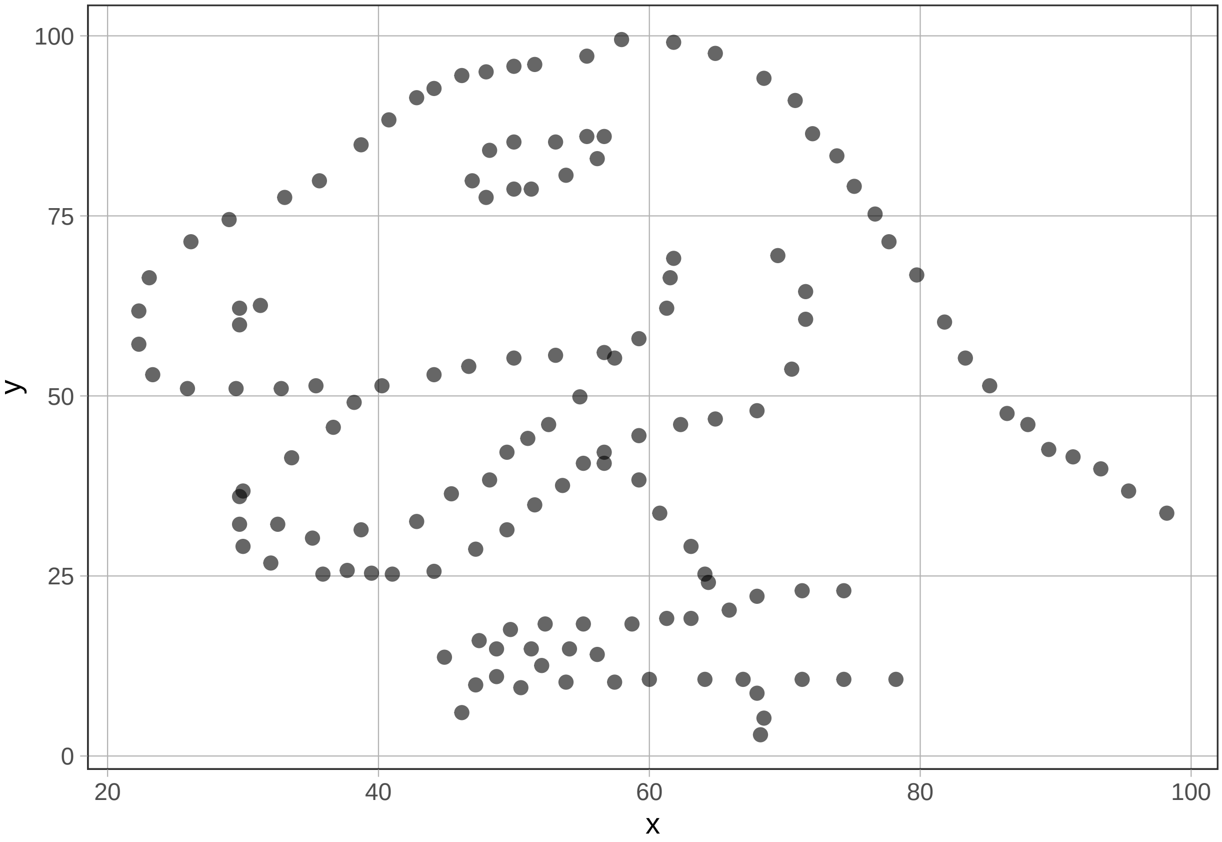
```
gf_point (y ~ x, data = temp_data)
```



```
#wow this is cute
dinodata <- lab1_data %>%
  filter(dataset == "dino")
ggplot(data = dinodata, aes(x = x, y = y)) +
  geom_point()
```



```
gf_point (y ~ x, data = dinodata)
```


100
75
50
25
0
y
20
40
60
80
100
x