# Problem Set 1

## R Markdown

This is an R Markdown document themed with {`bslib`} package. {`bslib`} makes it easy to customize the main colors and fonts of a `html_document`, `flexdashboard::flex_dashboard`, shiny::fluidPage(), or more generally any website that uses Bootstrap for styling. The `theme` parameter in the yaml front-matter of this Rmd document describes a `bslib::bs_theme()` object, which provides access to 100s of theming options (via its `...` argument) in addition to the main options demonstrated here (e.g., `bg`, `fg`, `primary`, etc).

This particular example uses {`bslib`}'s default Bootstrap version (which, at the time of writing, is Bootstrap 5). However, if reproducibility is important, it's recommended that you "lock-in" the version by adding `version: 5` to the `theme` definition.

## Themed Plots

When running this document with {`thematic`} installed, the `thematic::thematic_rmd(font = "auto")` effectively translates `theme` (CSS) settings to new global theming defaults for {`ggplot2`}, {`lattice`}, and {`base`} R graphics:
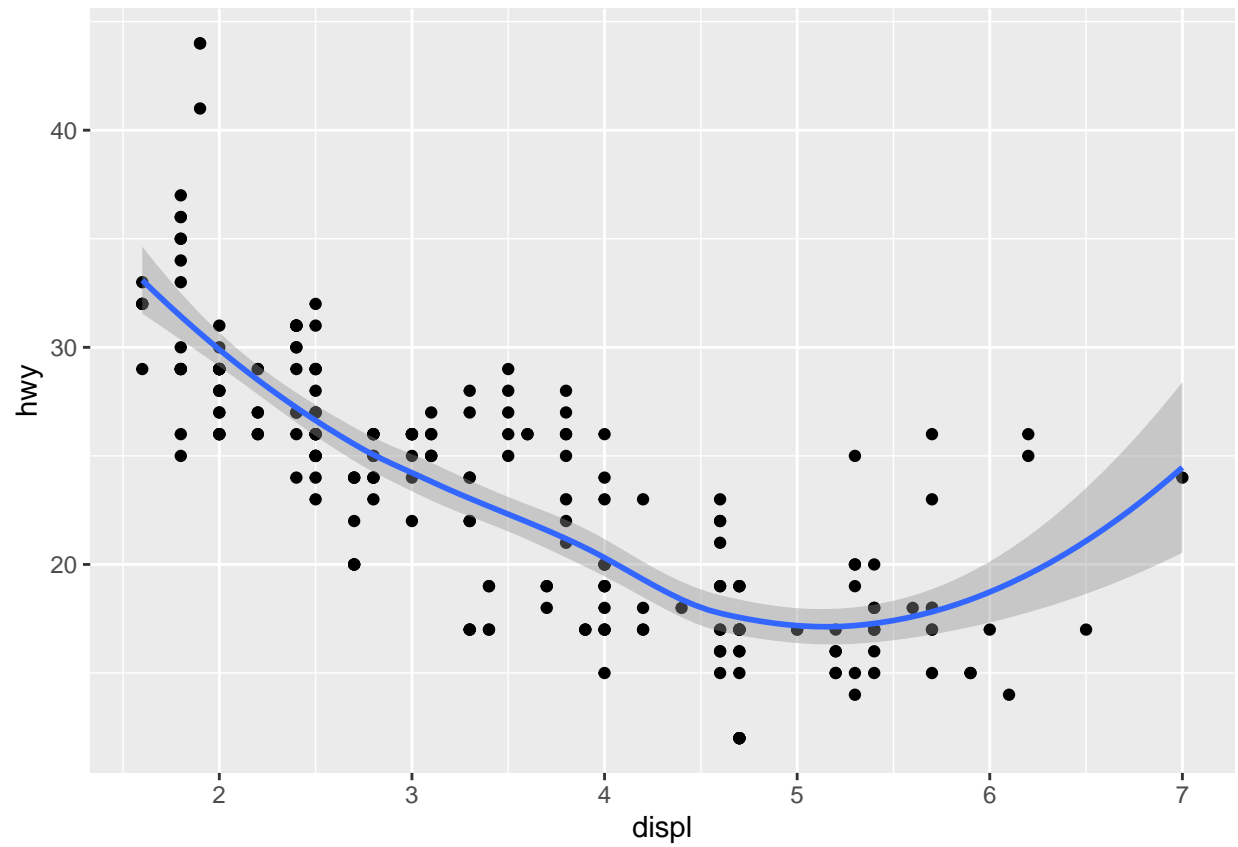
### ggplot2

```
library(ggplot2)
```

```
## Warning: package 'ggplot2' was built under R version 4.1.3
```

```
ggplot(mpg, aes(displ, hwy)) +
  geom_point() + geom_smooth()
```

```
## Error : The fig.showtext code chunk option must be TRUE
```
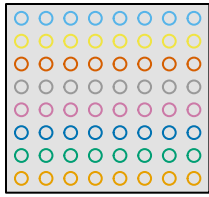
```
## 'geom_smooth()' using method = 'loess' and formula 'y ~ x'
```
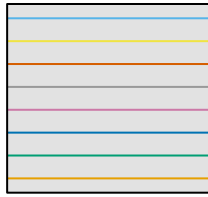
**lattice**

```
lattice::show.settings()
```

```
## Error : The fig.showtext code chunk option must be TRUE
```
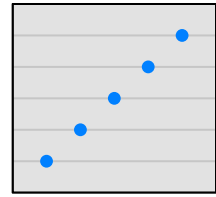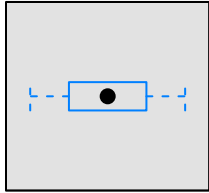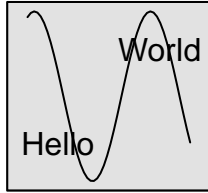
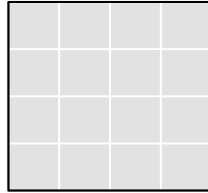superpose.symbol


superpose.line


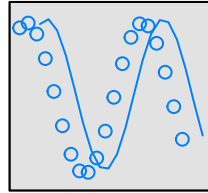strip.background


strip.shingle


dot.[symbol, line]
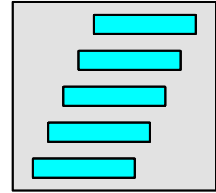

box.[dot, rectangle, umbrella]
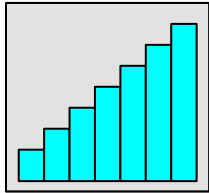

add.[line, text]


reference.line


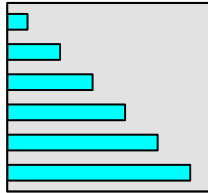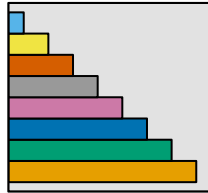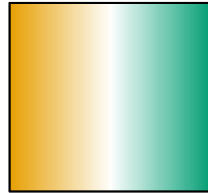plot.[symbol, line]


plot.shingle[plot.polygon]


histogram[plot.polygon]


barchart[plot.polygon]


superpose.polygon


regions

base