

Choose the Right Test or Model (student version)

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Save this file and “Day5.Rdata” in the same location. Then, after opening this file, go to **Session > Set Working Directory > To Source File Location**.

Then run this:

```
load("Day5.Rdata")
```

This will load 9 data sets into your working environment. The number after each data set represents the question it belongs to.

The goal is to analyze as many of these data sets as possible:

- Choose the right model for as many questions as possible. Explain your choice below the respective code chunk;
- Try to perform model diagnostics if applicable;
- Produce a summary and write a conclusion in words, below the code chunk.

Good luck!

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1. Crop yield (kg) is compared for different concentrations of insect spray.
 2. The height of trees of the same species is compared on two types of soil.
 3. Crop yield (kg) is compared for three types of insect sprays.
 4. A study assesses how much more likely patients are to have cancer, based on smoking behavior and sex.
 5. Tree density is compared before and after conservation policy changes.
 6. A company wants to know whether smoking is more common among its male or female workers.
 7. A study on shark conservation catches and tags sharks and then compares how many there are in different areas.
 8. Crop yield (kg) is compared for different combinations of type of insect spray and concentration.
 9. Mortality rates of male and female rats are compared after short-term exposure to different concentrations of hydrogen sulfide (H_2S , measured in ppm).