Graph plotting workshop I.

0. Install the Inkscape programme (download at https://inkscape.org/).
1. Import data describing lettuce varieties (lettuce.xlsx) to R
2. Create histograms of harvest days for both lettuce colours – combine them into a single two-panel plot, remove the histogram titles
3. Adjust margins of the plots to improve the fill of the graphical layout and fix the ranges of y-axes to the same values.
4. Try direct exporting to PowerPoint. Save the result in pdf or svg format. Open the svg file in the Inkscape software, make some edits and save as pdf and export to png.
5. Reset the graphical parameters to single panel and default margins
6. Create scatterplot of harvest mass ~ harvest days
7. Change the point symbols to filled circles, change the colors of the points to illustrate the leaf colour of the variety
8. Adjust point size
9. Change the orientation of y-axis values, adjust size of the axis titles and axis values
10. Add text "Lettuce varieties" somewhere inside the plot region and onto the plot margins
11. Add color-key legend to the plot
12. *Facultative (but recommended) homework – export the graph to pdf/svg/powerpoint/word.*

Graph plotting workshop II.

13. Create boxplot of harvest mass ~ leaf color
14. Create barplot of mean harvest mass classified by leaf color, add error bars indicating standard errors/confidence intervals/ranges
13. Create dotchart of mean harvest mass classified by leaf color, add error bars indicating standard errors/confidence intervals/ranges

14. Generate new data frame by:

```
big.data<-data.frame(y=rlnorm(30000, 4, 0.5)+sample(c(1,50, 8, 100,
9, 11, 20, 40, 20), 30000, replace=T), fact=c(rep("a", 12000),
rep("b", 18000)))
```

15. Create a boxplot of y ~ fact

16. Log scale the y-axis of the boxplot

16. Create a beanplot of y ~ fact; examine scaling of the y-axis and then try both linear and log-scaled axis scaling

Homework (to be completed after the second graph plotting workshop): Create a graphically nice plot with nice axis labels and minimum two panels – embed in into a word document with the code used to generate the figure pastet below. Convert the word file to pdf named *surname.pdf* and upload to Homework Vaults in IS. You can use your own real data or generate some imaginary data for this task.