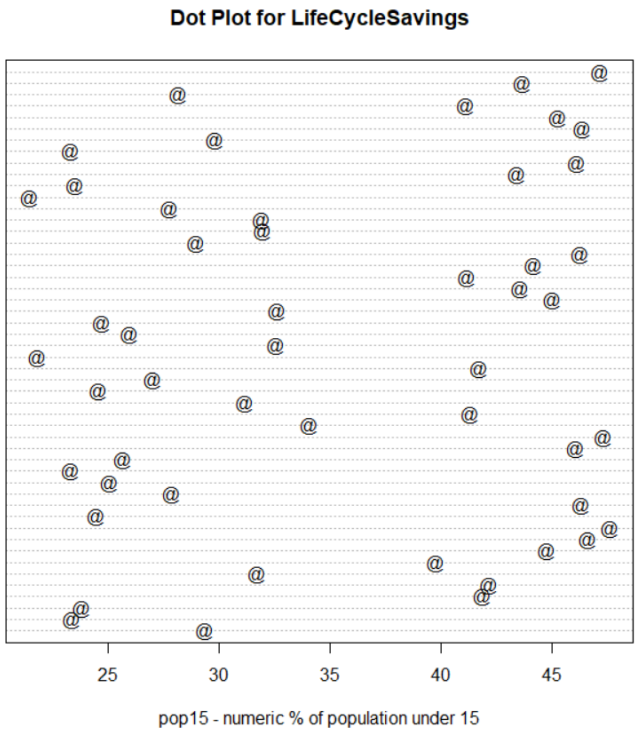
COIS 3510H: Assignment 2 – Sarah Roy (0650615)

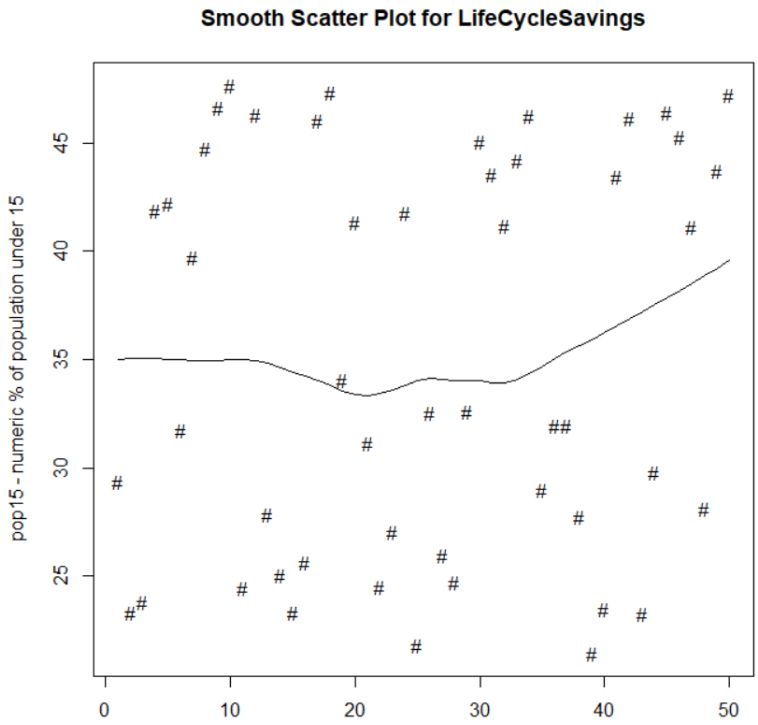
Screenshots of the Graphs:

Graph 1 - Dot Plot with '@' glyph



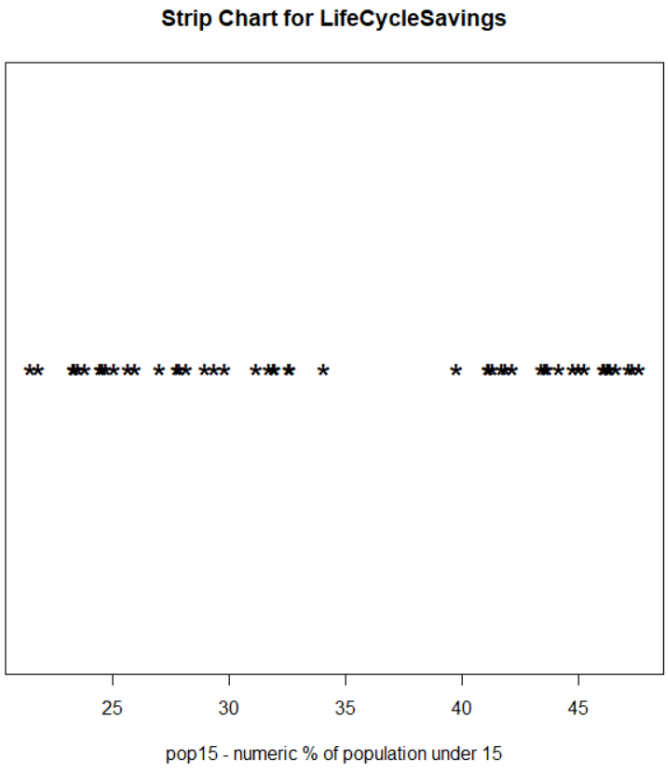
The first graph is a dot plot with ‘@’ glyphs that represents the numeric percentage of the population under 15 (pop15) in the LifeCycleSavings dataset.

Graph 2 – Smooth Scatter Plot with '#' glyph



The second graph is a smooth scatter plot using '#' glyphs that represents the numeric percentage of the population under 15 (pop15) in the LifeCycleSavings dataset. The scatter plot also shows a trend line of pop15.

Graph 3 – Strip chart with '*' glyph



The third graph is a strip chart with '*' glyphs representing the numeric percentage of population under 15 (pop15) from the LifeCycleSavings dataset.

Comparing the results:

For this question, I chose the same attribute from the LifeCycleSavings dataset, pop 15, numeric % of the population under 15, for consistency when comparing the results of each graph. In the first graph, the results are shown using the '@' symbol (pch='@') in a dot plot. The '@' sign makes it a little difficult to properly retrieve the correct values and so it's not the best usage of glyphs. The second graph is a smooth scatter plot that uses the "#" sign. The results are relatively simple to get the actual values from the plot and is a good way to represent this dataset. The third graph is a strip chart that uses the asterisk '*'. The results are not space properly in the chart with many of the results either fully or partially overlapping in the strip chart which makes it extremely hard for viewers to get the correct values from the chart.

R Code:

```
#Sarah Roy (0650615) - Assignment 2 Q4

#loading LifeCycleSavings dataset

data(LifeCycleSavings)

summary(LifeCycleSavings)
```

```
#Graph 1 - Dot Plot with '@' glyph

dotchart(LifeCycleSavings$pop15,pch='@', cex=1, main="Dot Plot for LifeCycleSavings",
xlab="pop15 - numeric % of population under 15")

#Graph 2 - Scatter Plot with '#' glyph

scatter.smooth(LifeCycleSavings$pop15, pch= '#', cex=1, ylab= "pop15 - numeric % of
population under 15", xlab=" ", main="Smooth Scatter Plot for LifeCycleSavings")

#Graph 3 - Strip chart with '*' glyph

stripchart(LifeCycleSavings$pop15, pch= '*', cex=2, xlab= "pop15 - numeric % of
population under 15", main="Strip Chart for LifeCycleSavings")
```