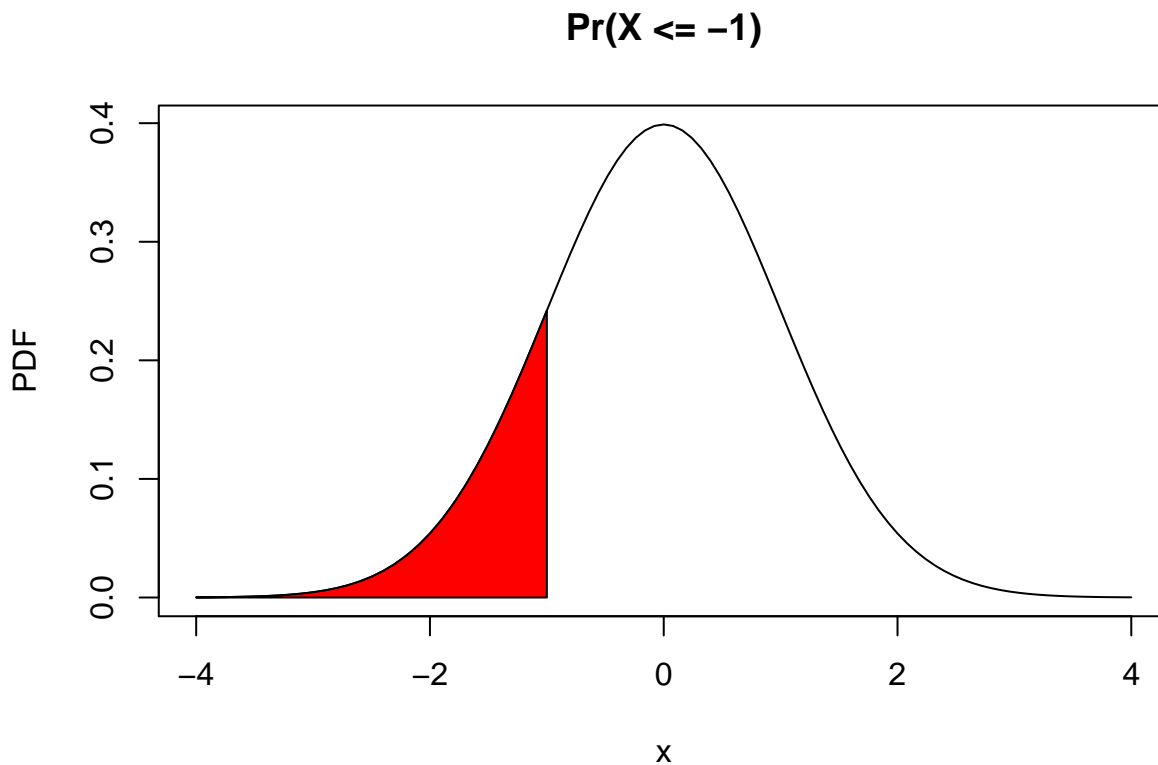


# Activity for Lab 3

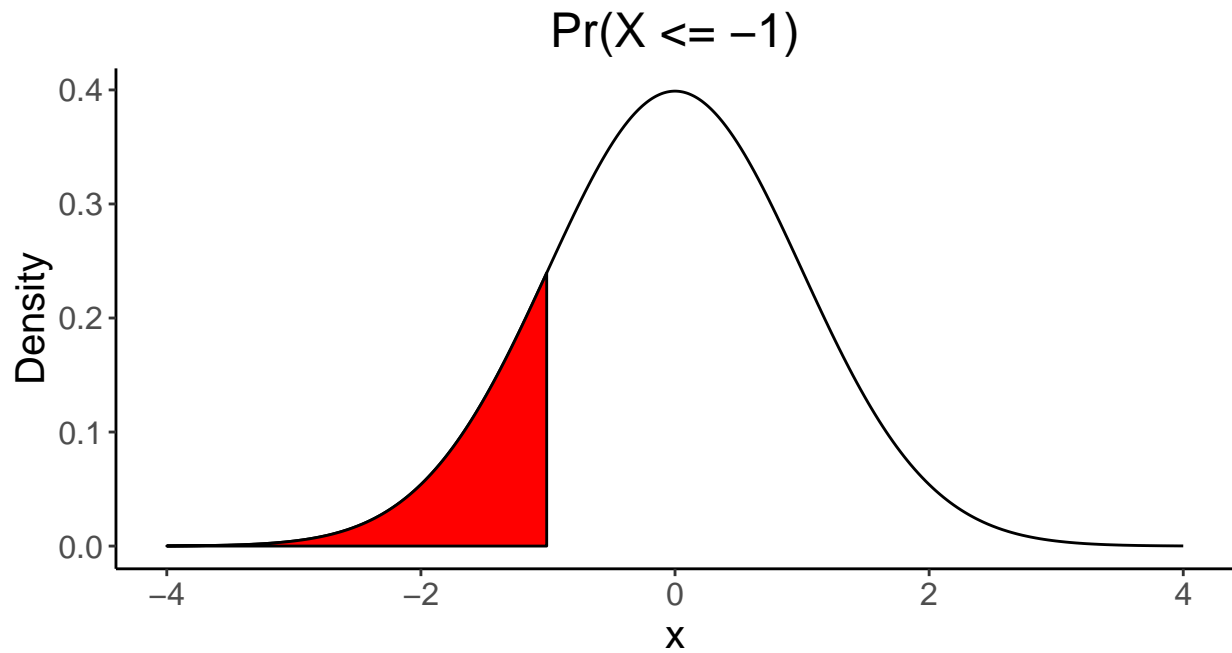
## Problem 1

In lecture 3 notes a density plot of a normally distributed random variable with area under the curve was created using base R graphics:

```
curve(dnorm, from=-4, to=4, ylab="PDF", main="Pr(X <= -1)")
coord.x = c(-4, seq(-4, -1, by=0.1), -1)
coord.y = c(0, dnorm(seq(-4, -1, by=0.1)), 0)
polygon(coord.x, coord.y, col=2)
```



Write R code using ggplot2 to recreate the density plot with area under the curve.



## Problem 2

- Load `gapminder` data.
- Create a plot for 2007 year data only: “GDP per capita” Vs “life expectancy”
- Annotate european countries with “GDP per capita” > 40000

