Regression & Time Series HW 6

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1. Generate n=100 observations of the time series by xt=wt-1 + 2wt + wt+1 where {wt} ~ N(0,1). Plot the sample autocorrelation

```
set.seed(1)
w <- rnorm(n=102, mean=0, sd=1)
wtm1 <- w[1]
wt <- w[2:101]
wtp1 <- w[102]
xt <- wtm1 + 2 * wt + wtp1
```

Create the plot

```
acf(xt, main='Autocorrelation of xt')
```