## Homework 6

## Problem 21

```
Xt_1 <- 1
sim.a <- function(n=100,phi=0.9,theta=0.99)
{
   Zt <- rnorm(n+3,sd = 1)
   phi*Xt_1 + Zt[4:(n+3)] + theta*Zt[1:n]
}
set.seed(42)
acf(sim.a(), lag.max=20, plot=TRUE)</pre>
```

## Series sim.a()

