```
# function to simulate weights of individuals from height
sim_weight <- function(H,b,sd) {
    U <- rnorm( length(H) , 0 , sd )
    W <- b*H + U
    return(W)
}</pre>
```

```
R code
3.3 H <- runif( 200 , min=130 , max=170 )
W <- sim_weight( H , b=0.5 , sd=5 )
plot( W ~ H , col=2 , lwd=3 )
```