Example 1.8: Monte Carlo Confidence Bands

Input

```
x <- (sin(1:100)+1)/2                      # demo example only
y <- (1:length(x))/length(x)
plot(sort(x), y)
nrsamples <- 19                            # nor of simulations
samples <- matrix(data = runif(length(x)* nrsamples),
nrow = length(x), ncol = nrsamples)
samples <- apply(samples, 2, sort)
envelope <- t(apply(samples, 1, range))
lines(envelope[, 1], y, col = "red")
lines(envelope[, 2], y, col = "red")
```