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Isotonic Regression

> If you know that your data should be strictly increasing, but the real data shows otherwise, use *Isotonic regression* to get a suitable strictly increasing approximation.

Applying isotonic regression is quite straight forward in R. The `isoreg()` function comes handy for this, as it can be used on numeric data without supplying special arguments.

```
y <- c(1, 0, 4, 3, 3, 5, 4, 2, 3)  # actual y that should only be increasing.
ir3 <- isoreg(y)
ir3$y # actuals
#>  [1] 1 0 4 3 3 5 4 2 3
ir3$yf # isotonic approximation
#>  [1] 0.50 0.50 3.33 3.33 3.33 3.50 3.50 3.50 3.50
plot(ir3) # graph
ir3$yf[ir3$iKnots] # Increasing points
#> [1] 0.50 3.33 3.50
```