

# 1 Warm-Up Question

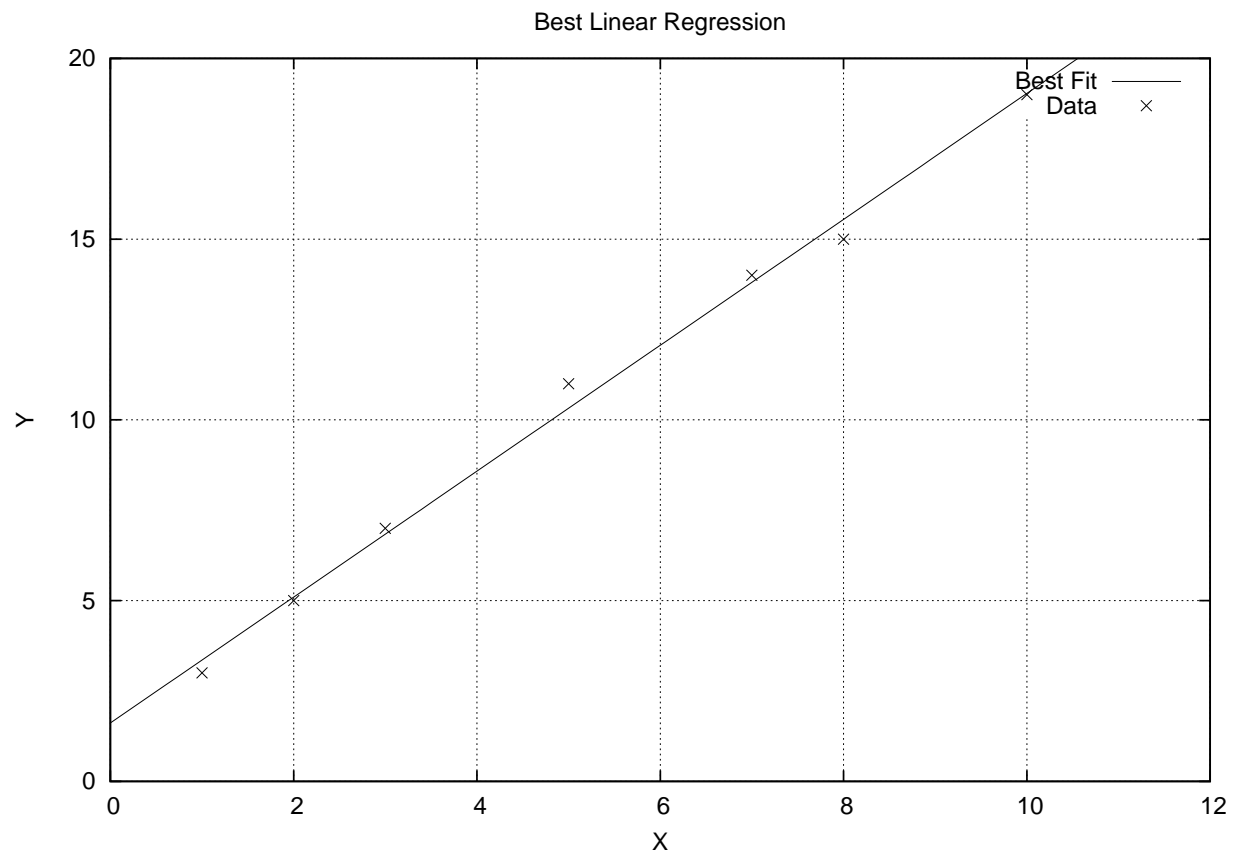
## General Problem

$\min t$   
 $a * x_i + b - y_i \geq t$   
 $-a * x_i - b + y_i \geq t$   
where  $x_i$  and  $y_i$  are from the set of data, finding  $a$  and  $b$

## Specific Problem

$a = 1$   
 $b = -0.857$

## Plot



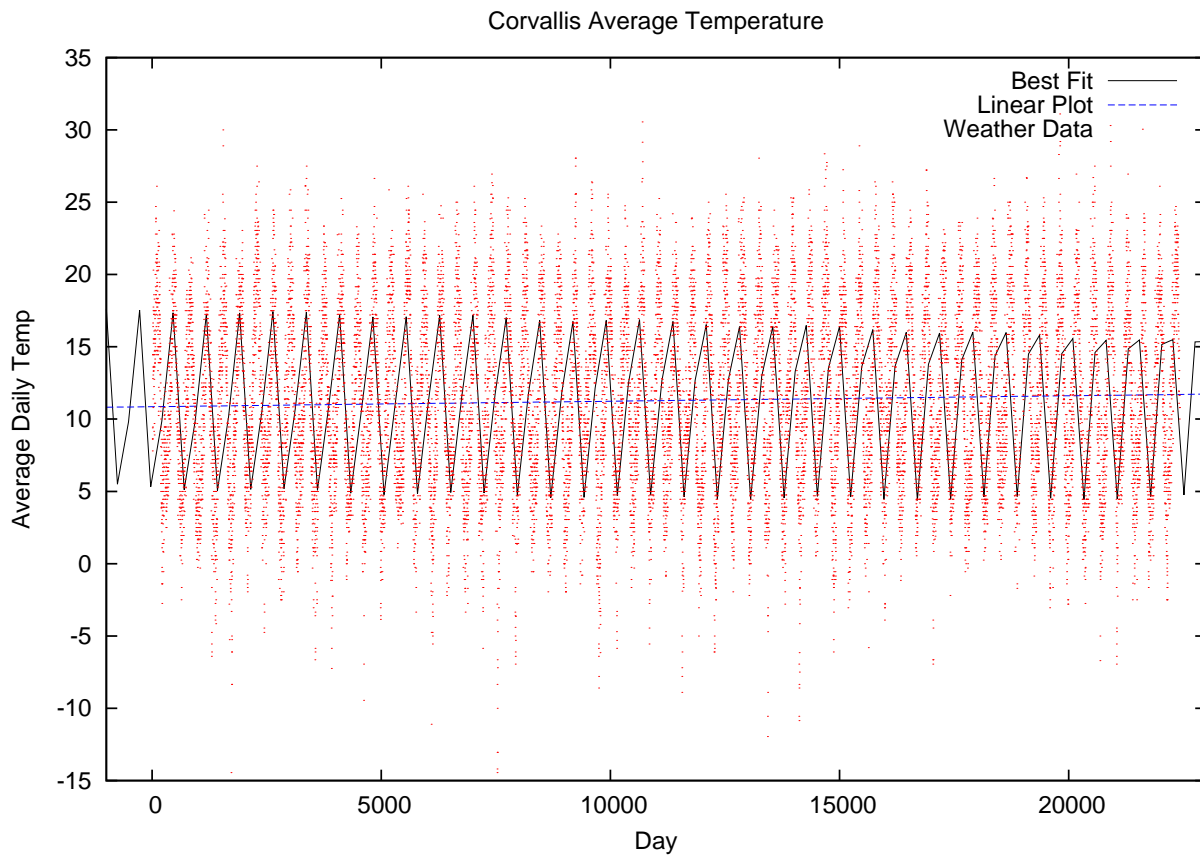
## 2 Warming-Up Question

### Linear Program Description

#### X Constants

$$\begin{aligned}x_0 &= 10.8564 \\x_1 &= 3.7825 * 10^{-5} \\x_2 &= -2.61736 \\x_3 &= 6.59226 \\x_4 &= 0.0190993 \\x_5 &= -0.133374\end{aligned}$$

#### Plot



#### $X_1$ Century Trend

With  $x_1$  being  $3.7825 * 10^{-5}$  or 0.000037825, this says that Corvallis is increasing by 0.00003 °C per century. this is a heating trend.