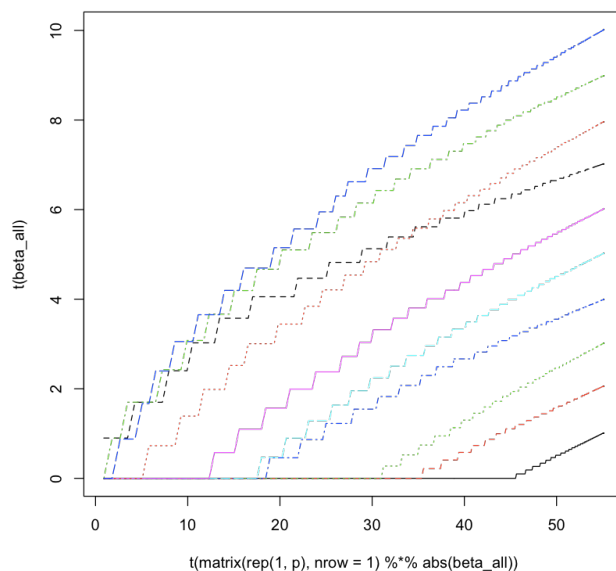


[R code]

```
n = 1000
p = 10
s = 10
T = 10000
X = matrix(rnorm(n*p), nrow = n)
beta_true = matrix(rep(0,p), nrow = p)
beta_true[1:s] = 1:s
Y = X%%beta_true + rnorm(n)
db = rep(0,p)
beta = matrix(rep(0,p), nrow = p)
beta_all = swRegression(X,Y)
matplot(t(matrix(rep(1, p), nrow = 1)%%abs(beta_all)), t(beta_all), type = 'l')
```

[Solution Path]



[Explanation]

Concise words about connection between lasso and stagewise regression.

- Paths would be nearly (if not exactly) the same, the stagewise approach is jagged.
- If taking a very large number of infinitesimally small steps, we would end up walking the same path as the lasso
- Thus we can also view the stagewise regression from the perspective of the primal form of the Lasso problem.