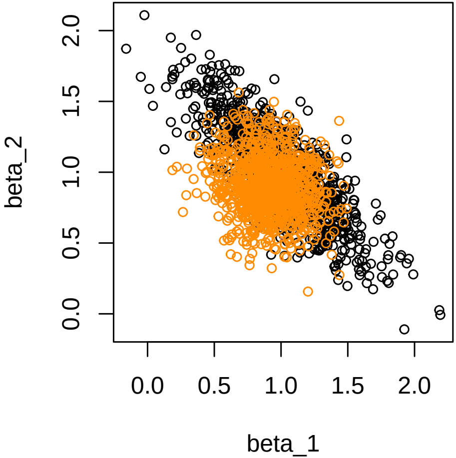
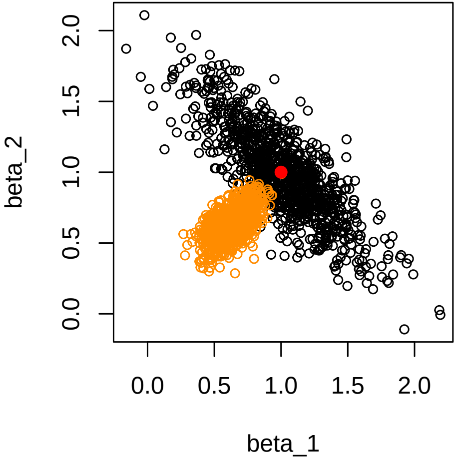
Kako ridge i lasso smanjuju korelirane koeficijente?

Model je $Y = X_1 + X_2 + \epsilon$, za ϵ $N(0, 1)$, te X_1 i X_2 jako pozitivno korelirane. Simulirali smo podatke (i X i Y) $N = 1000$ puta te svaki puta izračunali ls, te ridge i lasso koeficijente za razne λ.

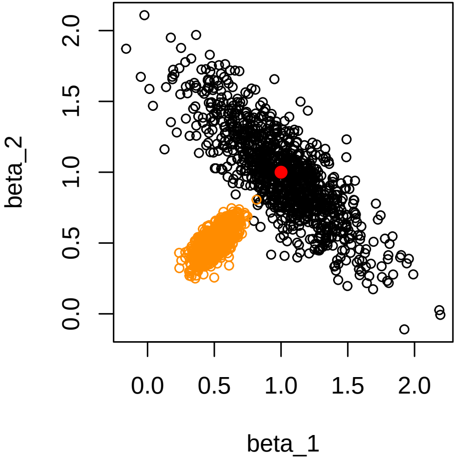
Ridge ($\lambda = 5$)



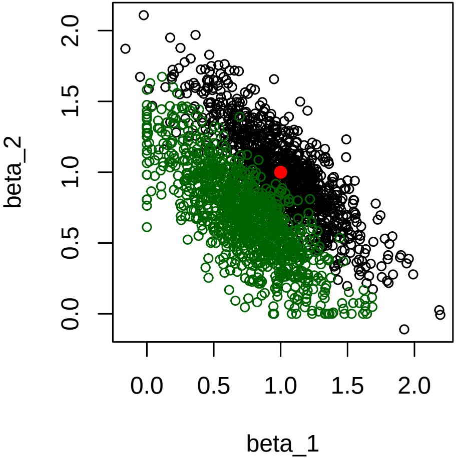
Ridge ($\lambda = 30$)



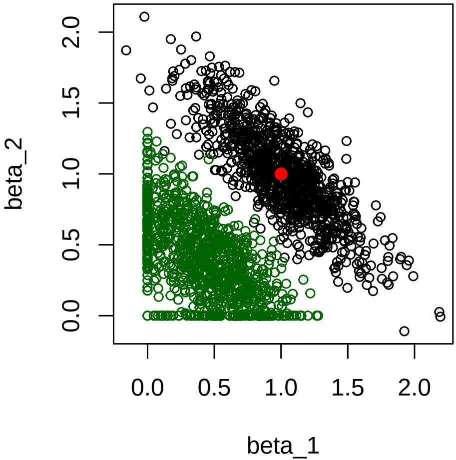
Ridge ($\lambda = 50$)



Lasso ($\lambda = 0.5$)



Lasso ($\lambda = 1$)



Lasso ($\lambda = 1.5$)