Algorithm 1 Stepwise Regression Analysis

Require: Dataset D, significance level α, removal significance level β
Ensure: Final model's variable set
 1: Initialize the model with all potential predictor variables
 2: **while** not reaching the stopping criterion **do**
 3:     **if** There exists a variable with p-value less than α not included in the model **then**
 4:         Add the variable with the smallest p-value to the model
 5:     **else**
 6:         **if** There exists a variable with p-value greater than β included in the model **then**
 7:             Remove the variable with the largest p-value
 8:         **else**
 9:             Stop the iteration
10:         **end if**
11:     **end if**
12: **end while**
13: **return** The variable set of the final model