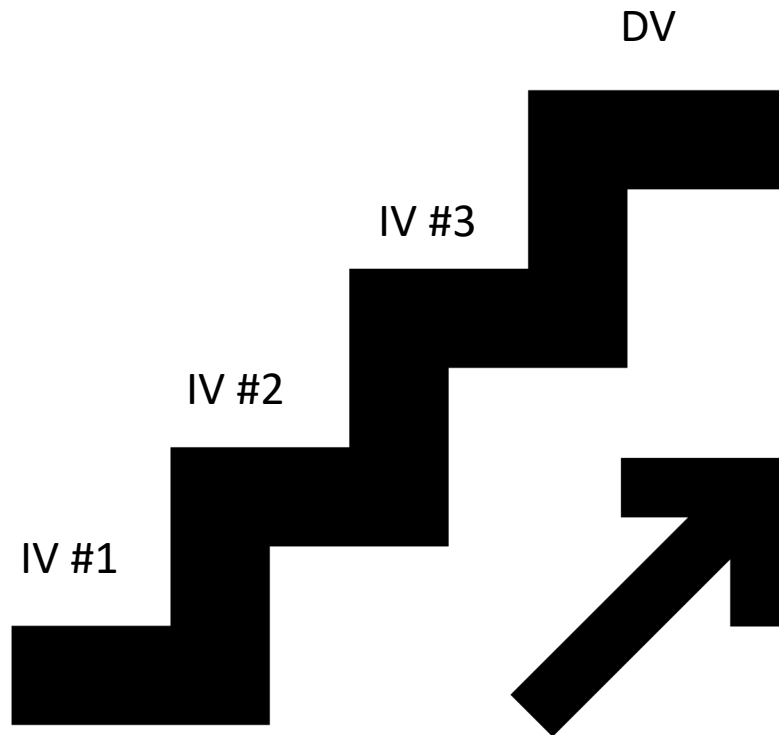


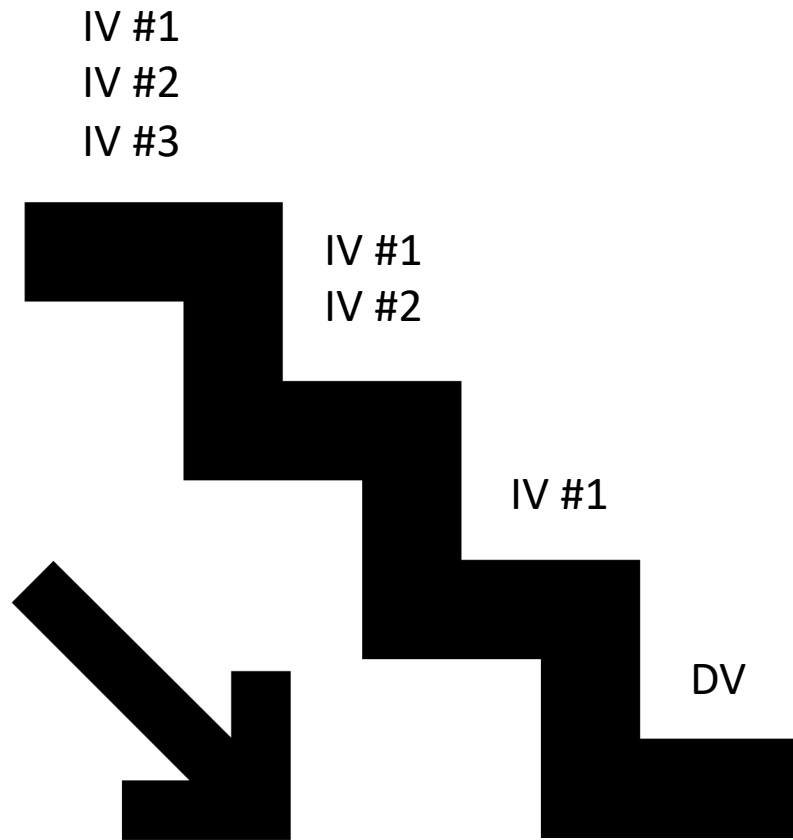
Stepwise Regression in R

What does Stepwise mean?

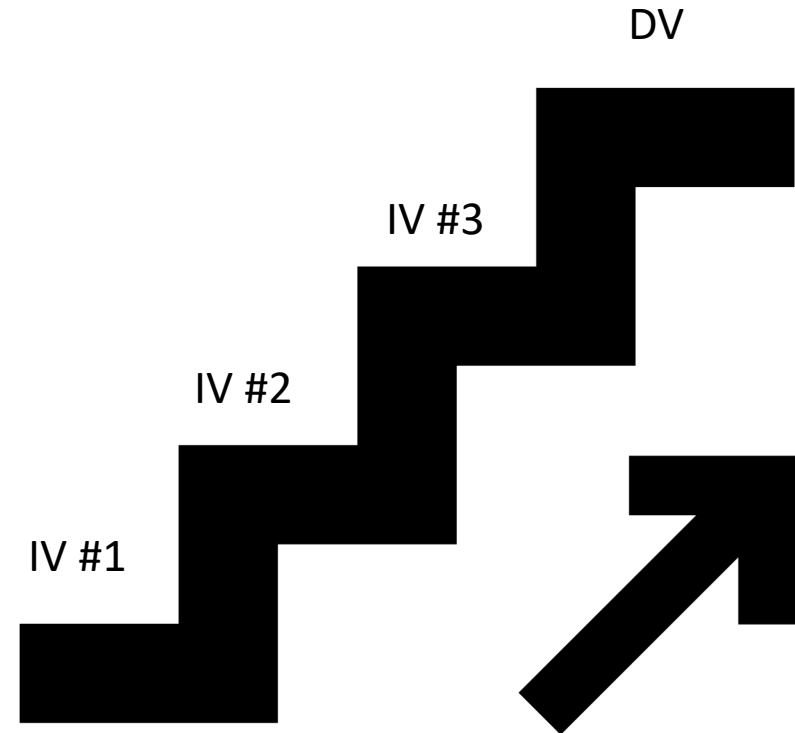
- See the influence of each IV on the DV separately first before examining the overall



Backwards vs. Forwards Elimination

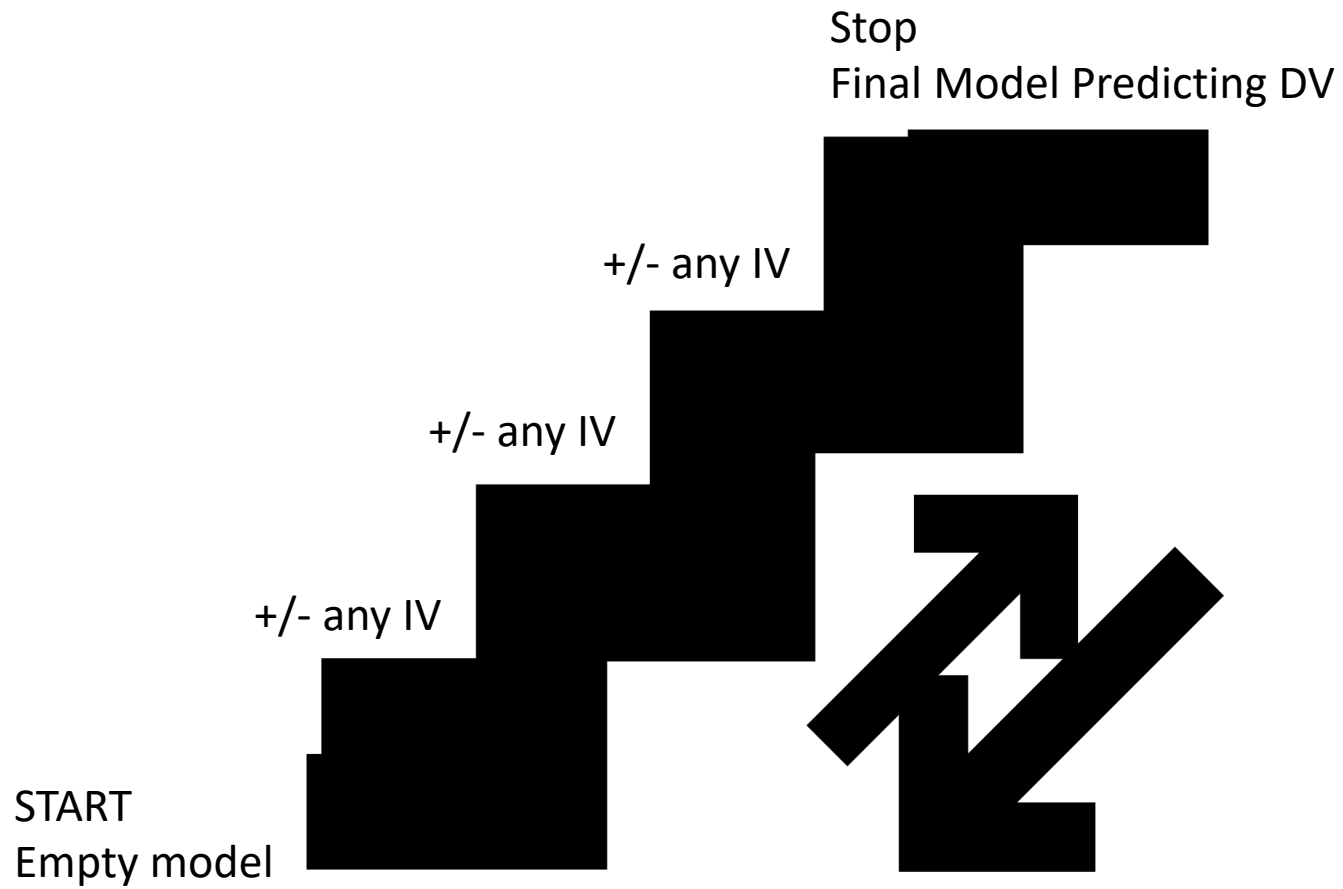


Backwards



Forwards

Hybrid



Bottom Line

- Usually you'll only run one of these on your data
- Pick the best option for what you're doing
- Don't worry about slightly conflicting results if you do run multiple
- Why run regression without it?!

Backward Elimination

- Start a model with everything in it

```
ModelName = lm(DV ~., data=dataFrame)  
summary(ModelName)
```

```
step(ModelName, direction="backward")
```

Forwards Elimination

- Start with an empty model

```
ModelName = lm(DV ~ 1, data=dataFrame)  
summary(ModelName)
```

```
step(ModelName, direction='forward', scope=(~IV1 + IV2  
+ IV3))
```

Hybrid

```
step(forwardModel, direction="both",  
scope=formula(backwardModel))
```