Sample of Subset Selection Procedure

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Subset Selection

Subset selection for the least squares regression is possible to do in R using the regsubsets function in leaps package. The said function is akin to the lm procedure for the OLS method.

In the summary below, we can see the best model per number of included variables. Variables with asterisk(*) means they are included in the proposed model.

| ## | | (Inter | cept) | AtBat | Hits | ${\tt HmRun}$ | Runs | RBI | Walks | Years | \mathtt{CAtBat} | CHits |
|----|---|----------------|-------|-------|-------|---------------|---------|---------|---------|---------|-------------------|--------|
| ## | 1 | | TRUE | FALSE | FALSE | FALSE | FALSE | FALSE | FALSE | FALSE | FALSE | FALSE |
| ## | 2 | | TRUE | FALSE | TRUE | FALSE | FALSE | FALSE | FALSE | FALSE | FALSE | FALSE |
| ## | 3 | | TRUE | FALSE | TRUE | FALSE | FALSE | FALSE | FALSE | FALSE | FALSE | FALSE |
| ## | 4 | | TRUE | FALSE | TRUE | FALSE | FALSE | FALSE | FALSE | FALSE | FALSE | FALSE |
| ## | 5 | | TRUE | TRUE | TRUE | FALSE | FALSE | FALSE | FALSE | FALSE | FALSE | FALSE |
| ## | 6 | | TRUE | TRUE | TRUE | FALSE | FALSE | FALSE | TRUE | FALSE | FALSE | FALSE |
| ## | 7 | | TRUE | FALSE | TRUE | FALSE | FALSE | FALSE | TRUE | FALSE | TRUE | TRUE |
| ## | 8 | | TRUE | TRUE | TRUE | FALSE | FALSE | FALSE | TRUE | FALSE | FALSE | FALSE |
| ## | | ${\tt CHmRun}$ | CRuns | CRBI | CWall | ks Leag | gueN Di | ivision | nW Put(| Outs As | ssists H | Errors |
| ## | 1 | FALSE | FALSE | TRUE | FALS | SE FA | ALSE | FALS | SE FA | ALSE | FALSE | FALSE |
| ## | 2 | FALSE | FALSE | TRUE | FALS | SE FA | ALSE | FALS | SE FA | ALSE | FALSE | FALSE |
| ## | 3 | FALSE | FALSE | TRUE | FALS | SE FA | ALSE | FALS | SE I | TRUE | FALSE | FALSE |
| ## | 4 | FALSE | FALSE | TRUE | FALS | SE FA | ALSE | TRU | JE 7 | TRUE | FALSE | FALSE |
| ## | 5 | FALSE | FALSE | TRUE | FALS | SE FA | ALSE | TRU | JE I | TRUE | FALSE | FALSE |
| ## | 6 | FALSE | FALSE | TRUE | FALS | SE FA | ALSE | TRU | JE I | TRUE | FALSE | FALSE |
| ## | 7 | TRUE | FALSE | FALSE | FALS | SE FA | ALSE | TRU | JE I | TRUE | FALSE | FALSE |
| ## | 8 | TRUE | TRUE | FALSE | TRU | JE FA | ALSE | TRU | JE I | TRUE | FALSE | FALSE |
| ## | | NewLeagueN | | | | | | | | | | |
| ## | 1 | FALSE | | | | | | | | | | |
| ## | | | | | | | | | | | | |
| ## | | | | | | | | | | | | |
| ## | | | ALSE | | | | | | | | | |
| ## | | | | | | | | | | | | |
| ## | | | | | | | | | | | | |
| ## | | FALSE | | | | | | | | | | |
| ## | 8 | FALSE | | | | | | | | | | |







