

```
#Pivots = 1; Mean-Regressor's slope = 3.4961515968037884e-07
; Std-Dev-Regressor's slope = 1.0302276006883035e-07
#Pivots = 2; Mean-Regressor's slope = 4.916793314444283e-07;
Std-Dev-Regressor's slope = 1.1175713390143024e-07
#Pivots = 3 ; Mean-Regressor's slope =
                                        5.991622450327044e-07 ;
Std-Dev-Regressor's slope = 1.3471701727974688e-07
#Pivots = 4; Mean-Regressor's slope = 7.627980965405394e-07;
Std-Dev-Regressor's slope = 1.4196685471279195e-07
#Pivots = 5; Mean-Regressor's slope = 8.904734979167049e-07;
Std-Dev-Regressor's slope = 1.273981681584242e-07
#Pivots = 6; Mean-Regressor's slope = 1.1024589319782538e-06
; Std-Dev-Regressor's slope = 1.4515462023436632e-07
#Pivots = 7 ; Mean-Regressor's slope =
                                        1.2223495860063329e-06
; Std-Dev-Regressor's slope = 1.878943808029307e-07
#Pivots = 8 ; Mean-Regressor's slope =
                                        1.2810996026001795e-06
; Std-Dev-Regressor's slope = 1.6422127911381177e-07
#Pivots = 9; Mean-Regressor's slope = 1.4480772288704688e-06
; Std-Dev-Regressor's slope = 1.8686514055125294e-07
#Pivots = 10 ; Mean-Regressor's slope =
                                         1.4933702165995745e-06
; Std-Dev-Regressor's slope = 1.4816787820443597e-07
#Pivots = 11 ; Mean-Regressor's slope =
                                         1.7970090399333286e-06
; Std-Dev-Regressor's slope = 2.510199026170732e-07
#Pivots = 12 ; Mean-Regressor's slope =
                                         1.917025820929029e-06
; Std-Dev-Regressor's slope = 1.8883408697307429e-07
#Pivots = 13 ; Mean-Regressor's slope = 2.0614712290864666e-06
; Std-Dev-Regressor's slope = 2.461671888314659e-07
#Pivots = 14 : Mean-Regressor's slope = 2.2092374980959115e-06
; Std-Dev-Regressor's slope = 2.7888957590102936e-07
#Pivots = 15; Mean-Regressor's slope = 2.3364999838042676e-06
; Std-Dev-Regressor's slope = 2.4257294760478547e-07
Sensitivity of the Slope of the Linear Regressor of the Mean to
             = 1.4238984080269829e-07
the #Pivots
Sensitivity of the Slope of the Linear Regressor of the Std-Dev
to the #Pivots = 1.1072243680762182e-08
```

As evidenced by the graphs and the slope data, there is no marked decrease in the slope of the Mean Regressor or the Std Dev Regressor for run times when the number of pivots increase. The explanation for this could be, despite the smaller list we have to iterate through, we still need to iterate through the entire list m*O(n) times during every recursion, which scales the computation linearly with increase in the number of pivots. This could compensate for any decrease in runtime that could be obtained as a result of iterating through shorter lists.

