

# Paper Exercise 2

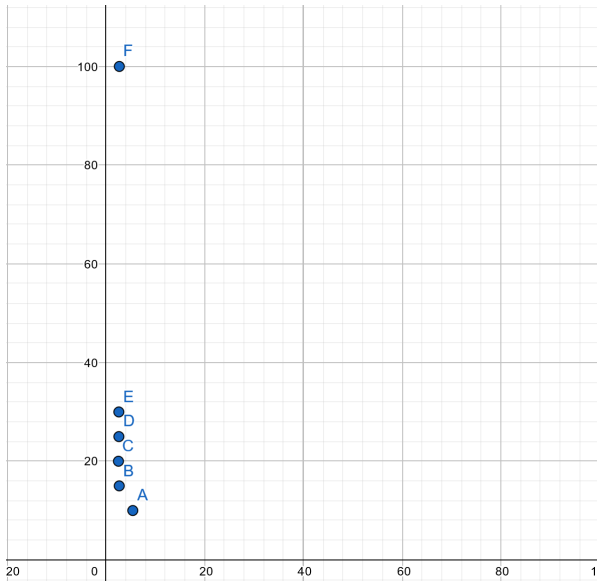
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## 1 Skiplist Max Height differences

Assuming different values for max height we can establish a "best" max height value for this program. I collect 7 values for heights and the corresponding time of execution:

- **A)** MAX HEIGHT 10: 5.44(s)
- **B)** MAX HEIGHT 15: 2.69(s)
- **C)** MAX HEIGHT 20: 2.53(s)
- **D)** MAX HEIGHT 25: 2.62(s)
- **E)** MAX HEIGHT 30: 2.61(s)
- **F)** MAX HEIGHT 100: 2.71(s)
- **G)** MAX HEIGHT 1000: 4.46(s)
- **H)** MAX HEIGHT 10000: 21.55(s)



The best value for max height is 20 for an execution time of: 2.53s. Using time of compilation in the x-axis and number of values in the y-axis I assume max height values spread in the graph like a logarithmic function.