Searching

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Introduction

Unsorted Search

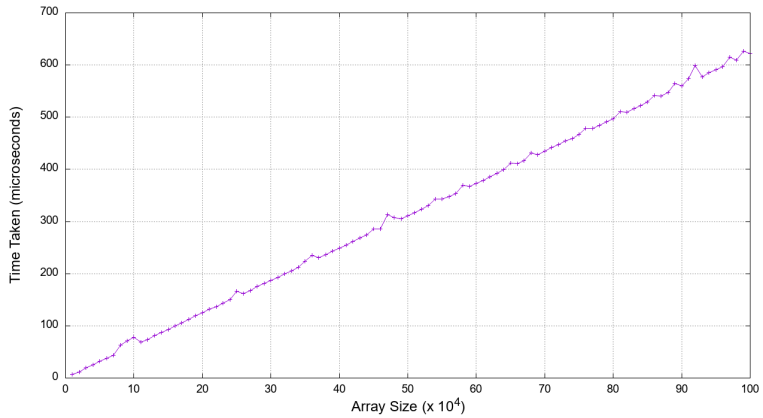


Figure 1: Benchmark: Time vs Array Size

Layout

0.1 sections

`*` (for example `\section*`).

inserting code

`minted`: `List.sort()`.

```
  for (int i = 0; i < 100; i++){
    sum += i;
  }
```

numbers

1.2345678s
1.235s or 1.2s?

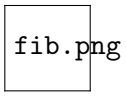
tables

prgm	runtime	ratio
dummy	115	1.0
union	535	4.6
tailr	420	3.6

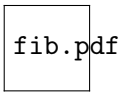
Table 1: Union and friends, list of 50000 elements, runtime in microseconds

no f*ing screen shots

graphs



(a) using raster graphics



(b) using vector graphics.

Figure 2: Difference in image formats.

The graph in Fig.3 is generated using Tikz and as you can see, I know have the time in "μs" instead of in "us".

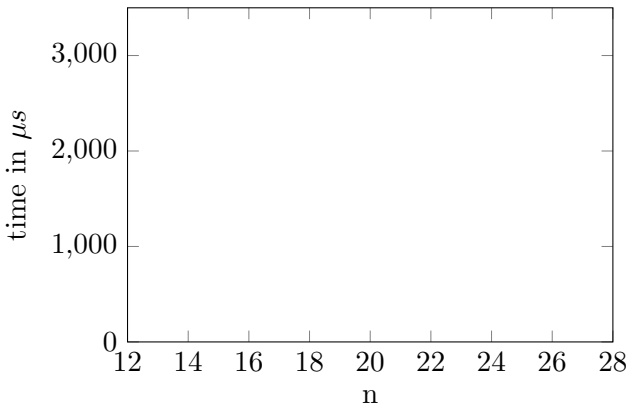


Figure 3: The same graph using TikZ

LaTeXthings

Some LaTeXerrors that I frequently see that could easily be avoided if you only know where they come from.

less than

If you in your LaTeX code write "5 < 7" it will look like 5 ¡ 7 and "9 > 7" will look like 9 ¿ 7. Using the characters < and > directly does not work ... so, how did I do it? I used the commands `\textless` and `\textgreater` to generate the symbols < and >.

You could also use {`\tt 5 < 7`} but then it will use the teletype font and look like this: `5 < 7`.

Still another way is to write it using so called `math mode`. This is a mode used for writing mathematical formulas in a nice way. You enclose your expression in `$` signs like this `$5 < 7$` and then it will look like this $5 < 7$.

If you have a larger mathematical expression you enclose it in double $ and the result is that it is written centered with some space around it like this:

$$5 < (3 * 8/3)$$

0.2 math mode

There are several ways that you can write $n \log(n)$ in LaTeX.

- `$n log(n)$` : which is interprated as $nxyz(n)$ i.e. $n \times l \times o \times g \times (n)$ and since we then omitt the multiplications it will be displayed as $nlog(n)$
- `$n \times log(n)$` : which is better since we then explicitly have one multiplication and it is displayed as $n \times log(n)$.
- `$n \log(n)$` : which is how it should be done, its now displayed as $n \log(n)$.

why strange font

If you want to write *foo* in teletype font you write like this `{\tt foo}`. If you forget the closing } then it will look like this: `foo. Now everything here after until the end of you report will look like this.`

make