

DEBUGGING, THE OLD FASHIONED WAY

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I grew up in early 70's London, England. When I was young my father was an accountant in the city. Like many in that time, he was spending more and more time working on the mainframe, writing programs on punch cards and booking time to try them out. I remember him reading through stacks of cards at home in the evening checking his logic. But most of all, I remember the once-a-year event where all the kids of the staff would come into the city on the weekend and help with the debugging.

The system was shut down and we were sent into the racks to dust the cobwebs off the boards. We were small enough to reach between the cards with a feather duster. I remember being told just how important it was to keep the dust down as this helped airflow and stopped short circuits.

Looking back, I remember being amazed at all that advanced technology; it was an exciting time. But nowadays, no one believes me when I tell them my first ever job was debugging on the mainframe.

People growing up today will miss so many of the experiences that we had:

- Setting up your own bulletin board or using dial-up modems to connect systems all around the world
- Finding a very quiet place to format the servo surface of a 12-inch hard disk
- Making a line printer sing
- Stopping a system and stepping through the instructions on the front panel
- Writing efficient code to do floating point math
- Saving space by using two digits for the date
- Knowing by the tone what speed your modem is connecting at.
- Soldering up an RS232 cable from memory
- Being able to discuss the relative merits of token ring versus vampire taps into the WAN
- Being able to read assembler from the HEX

While these and many other examples of getting down and dirty with technology may seem quaint, they gave us all a deep understanding of efficiency; we knew what it took to make something happen, and so understood the benefits of being neat. It's why the mainframe is still so efficient today, and why it will be even more relevant as the world looks to be green.