

How to run MSDOS Statistical Software in Windows: An important Blast from the Past

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When Windows dropped its support of 16 Bit and 32 Bit MSDOS programs in favor of 64 Bit Programs, a considerable amount of useful statistical software was lost, seemingly forever. Fortunately, there is a free software program, DOSBOX that allows a user to emulate the right architecture to run these. These are useful interactive programs written and verified over dozens of real applications, and widely used by others in the past. Here is how to obtain and run this writer's four programs. You can get the links below electronically by Googling Jonathan Shuster UF, and get directly to his Department Web Page.

1. Download free copies of one or more of these programs from:
 - a. BINOMIAL.EXE: <https://www.dropbox.com/s/tywwa56vjppy0lt/BINOMIAL.EXE?dl=0>
 - b. CONF.EXE: <https://www.dropbox.com/s/ff0hz62ozc7t4if/CONF.EXE?dl=0>
 - c. CRCSSIZ.EXE: <https://www.dropbox.com/s/zjx26s0jaey5fho/CRCSSIZ.EXE?dl=0>
 - d. XACTB.EXE: <https://www.dropbox.com/s/ieer9nykldypsau/xactb.exe?dl=0>
2. These are (a) xactb.exe (Barnard's exact unconditional test for comparing two independent binomial proportions-much more powerful than Fisher's Exact **Conditional** Test). Output also includes Fisher's Exact Test; CONF.exe (exact one- and two-sided confidence intervals for binomial proportions); (c) BINOMIAL.exe (exact cumulative distributions for hypergeometric and binomial data); (d) CRCSSIZ.exe (Sample size calculations for clinical trials of survival via the logrank test per Jonathan Shuster's CRC Text: Sample Size Guidelines for Clinical Trials. It invokes the template from Page 7. This allows for losses to follow-up and a common average hazard reduction factor to both arms after the endpoint is reached {can be 1.0 for exponential survival}). Save these files to a useful location with file extension .exe to say

C:\users\public

3. Download free copy of DOSBOX from <https://sourceforge.net/projects/dosbox/>

You can run the program as follows: We illustrate with xactb

1. Double click on DOSBOX (ICON on your desktop after the download)
2. Mount C C:\users\public (Type this then enter)
3. C:\xactb (Type this then enter)

It will self-prompt. Answer 0 to the first two questions (maximize over full range of probabilities, and no continuity correction).

Note that once the program has completed its operation, **you can run it again by simply using the UP-ARROW and then enter.**

These programs are very user friendly.

Other statisticians may wish to revive their own MSDOS programs and offer them to the public.

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