

To verify the checksums, you can use
"GtkHash" with Ubuntu Linux or, for example,
"Checksums calculator" from Sigma Informatics
with different operating systems.

GtkHash: Installation from [here](#) or with Synaptic (Ubuntu)

Checksums calculator: Download from [Sigma Informatics](#)

Checksums

Version March 30, 2025

(Manual and programs have been slightly revised.)

File [p5-manual-03-2025.pdf](#) (Size: 14,125,370 Bytes)

md5: 6882bcc7d781f1698efc3c50e97f2948
sha1: 5d07459674ce4d4db1219720700cd21edebb748d
sha256: ac3a9419b99c98de3f89caa91c6f39ffb3abc94059fdd6b0c9fb91e19decb66b
sha3-256: d811460a6cf03ee6e6f96b5dd0c928b6daec3f84f9218b54c208d1d80a76daa9
crc32: a9a50fc5

File [p5-program-03-2025.zip](#) (Size: 4,755,320 Bytes)

md5: b8ed8d8fdd9a9cf7bca02b87727199f4
sha1: 1529b0413382ee7c34c260c92ad3b138362feda0
sha256: f57b888dd5af2ff6944c40973b1750be8dd9476117ddc5f01c5d67058108ab33
sha3-256: 013e6b3ef9e3efd0dc47468b985dc3668f40242080910034fb50456fa0c4d1c8
crc32: 57c53635

File [topo-program-03-2025.zip](#) (Size: 14,714,002 Bytes)

md5: 9de58660c5e920222150a7649d85bcc8
sha1: e2aad7811fd85e1908fbabdd98d5f6bfcd fed904
sha256: 8c0c2d88f549c21737917f3f0466c37905e1f69dc308f01d45fb5493ef616e04
sha3-256: b2fae49b6f3969d0bdf2c0604884a62d784154a515f6e9572daf8aae7fdc7c0c
crc32: d346aa5e