

**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 August 31, 2025

(The three files have been slightly revised and have  
the numbers 169, 170, and 171 in the publication list.)

**File** **p5-manual-08-2025.pdf** (Size: 14,142,135 Bytes)

md5: 3fb9a70d42fc4526a76c158c21fa3ee9  
sha1: a96f526c9df4b95bd0b67729d6631db37c8a2117  
sha256: f42944845605bb59fafbb63aa672a133bac9869044b50729b85b66b9292bab52  
sha3-256: 316ab74835339053a57eae0eef5beed03c743cb86ecac508513a3bda65a5b4  
crc32: 195c7ef8

**File** **p5-program-08-2025.zip** (Size: 4,757,780 Bytes)

md5: 4900be4c1a62fc66b5155be58a77ae24  
sha1: 4373dfd8b9a06092cd2d3b53370be882541507c4  
sha256: ea54a8aa50b7a441eb67f722335ef7d59e8285a1fb6ec85e2e3aaa298ac6f830  
sha3-256: 0fae7a9210b93ccb7bb5526f3224d3f8ba3e13b9dff8edcacb1b3d69e3b78b13  
crc32: ca49ada0

**File** **topo-program-08-2025.zip** (Size: 14,713,900 Bytes)

md5: cac08f7db694d5e5c579e094fe98a1d2  
sha1: 9082b3b8d63d231ecd4b78698acaf7584aa719d5  
sha256: c4900d308aaf276cbb06eed3b0861e34ca8e823d3b400752625aa308d5a244b0  
sha3-256: b8e633f46d3ad9a382a30b04500a2a16834e35602edb7cb026e91804162eb86d  
crc32: d7932f95