

Standard Calculator:

External Inputs: do calculations – such as numbers, convert units

External Outputs: no external outputs

Logical internal files: none – we cannot store the data in external outputs

Logical interface files: none – it is stateless. It does not remember anything

External Enquiries: none – it has no connection to other External enquiries

Total functionality is: $(2 \times 4) + (0 \times 5) + (0 \times 10) + (0 \times 7) + (0 \times 4) = 8$

It is very little number but as it is obvious, the calculator is very simple program with a few functionalities.

Notepad:

External Inputs: It allows to write a text,

External Outputs: There can not be done any reports or views.

Logical internal files: we can save the text into a file,

Logical interface files: browse the system file system – it can search many files with various extensions, but we cannot open them.

External Enquiries: we can search highlighted word or phrase in Bing search engine, can get a time from system,

Total functionality is: $(1 \times 4) + (1 \times 5) + (1 \times 10) + (1 \times 7) + (2 \times 4) = 46$

Firefox browser:

External Inputs: Display internet pages, display source-code of the web.

External Outputs: send notification when a certain activity happens,

Logical internal files: 7

Logical interface files: extension, walk through FTP server, Images downloaded from the web

External Enquiries: HTTP methods – gaining data from HTTP/FTP servers.

Total functionality is: $(2 \times 4) + (1 \times 5) + (7 \times 10) + (3 \times 7) + (1 \times 4) = 108$

According to stored data: There is huge amount of data stored by the browser. All can be found at official Mozilla support. So Local interface files is a great number. It would influence the final number a lot so let estimate there is about 7 local internal files.

<https://support.mozilla.org/en-US/kb/profiles-where-firefox-stores-user-data>