The revision program should:

1. Be able to count the number of all files.
2. Be able to count all files individual all extensions present.
3. Be able to map all extensions present to a programming language/file type.
4. Be able to count the lines in each file.
5. Be able to count the lines for each individual programming language/file type (the latter obtained by performing mapping in *step 3*).

The following data structures and functions are defined to achieve the requirements:

1. ***REVISION\_INIT\_PARAMS***. This structure stores the initialization parameters of the revision provided by the user at launch.
2. ***REVISION***. This structure represents the revision engine, storing the core information about the revision itself.
3. ***REVISION\_ENTRY***. This structure represents the file as a revision record, which is used during revision to store information about extensions, languages, and lines of code for each language.
4. ***REVISION\_RESULTS***. This structure stores the results of the revision for output to the user.
5. ***InitializeRevisionEngine***. This function initializes the revision engine using the provided configuration parameters.

Parameters:

* 1. *PREVISION\_INIT\_PARAMS* ***InitParams***. Supplies the configuration parameters provided by the user.