What are short exit codes?

Box names Arbitrary Code Execution needs exit codes to branch back to the game's code after the execution. Without an exit code the data right after box names would be read as more code to execute and this would lead to an inevitable crash.

Exit codes can take up to half of the available space so having a shorter version of them can be a necessity for some of the more complex payloads. The purpose of this simple guide is writing some data in the box 14 name memory address that would not be possible to write with regular characters in order to allow the use of short exit codes for the next executions.

What do I need to do prior to starting this?

It is assumed you already have access to Ruby/Sapphire ACE. If you do not, you can find a guide here:

https://pastebin.com/17168wi3 (for non-Japanese non-Spanish games)

https://pastebin.com/TbTKC0kH (for Spanish games)

https://pastebin.com/D3GULLe6 (for Japanese games)

Once you're able to perform ACE on your Ruby or Sapphire game all you need to do is execute this code:

For English games:

```
Box 1: (zLloyFRn) [lower case L]

Box 2: (LRnnEUn ) [ends with space]

Box 3: (EEyI!q ) [upper case i; ends with two spaces]

Box 4: (EEEEEEEE)

Box 5: (EEEEEEEE)

Box 6: (EEEEEEEE)

Box 7: (EEEEEEEE)

Box 8: (EEEEEEEE)

Box 9: (EEEEEEEE)

Box 10: (EEEEEEEE)

Box 11: (EEHI...o ) [upper case i; ends with two spaces]

Box 12: (ExO?l ) [upper case o; lower case L; ends with three spaces]

Box 13: (iR?n-?n) [one space after -]

Box 14: (EEE ) [ends with five spaces]
```

For Italian and Spanish games:

```
Box 1: (zLloyFRn) [lower case L]

Box 2: (LRnnEUn ) [ends with space]

Box 3: (EEyI!q ) [upper case i; ends with two spaces]

Box 4: (EEEEEEEE)

Box 5: (EEEEEEEE)

Box 6: (EEEEEEEE)

Box 7: (EEEEEEEE)

Box 8: (EEEEEEEE)

Box 9: (EEEEEEEE)

Box 10: (EEEEEEEE)

Box 11: (EE4T...o ) [ends with two spaces]

Box 12: (ExSxl ) [lower case L; ends with three spaces]

Box 13: (HI?nQ ?n) [upper case i; one space after Q]

Box 14: (EEE ) [ends with five spaces]
```

For German and French games:

```
Box 1: (zLloyFRn) [lower case L]
  Box 2: (LRnnEUn ) [ends with space]
  Box 3: (EEyI!q ) [upper case i; ends with two spaces]
  Box 4: (EEEEEEEE)
  Box 5: (EEEEEEEE)
  Box 6: (EEEEEEEE)
  Box 7: (EEEEEEEE)
  Box 8: (EEEEEEEE)
  Box 9: (EEEEEEEE)
  Box 10: (EEEEEEEE)
  Box 11: (EE4T...o ) [ends with two spaces]
  Box 12: (ExSxl ) [lower case L; ends with three spaces]
  Box 13: (HI?nY ?n) [upper case i; one space after Y]
  Box 14: (EEE
                 ) [ends with five spaces]
For Japanese games:
  Box 1: (0うぶぶメいぶ) [starts with space; zero; う not う;い not ぃ]
  Box 2: (F \delta \mathcal{U} \delta) [starts with space; one space after \delta; two spaces after \mathcal{U}]
  Box 3: (bm + bb < ) [b not b; b not b; ends with two spaces]
  Box 4 to 13: Anything
  Box 14: (EEEEEEEE)
```

After the execution in your box 14 you should see something like this: EEEŒ for non-Japanese games or EEE † for Japanese games.

If you do you can save the game, you're ready to use short exit codes. If you don't, check for mistakes in the box names and try again.

Short exit codes will always use this box 14 name. If you end up changing its name for whatever reason just execute this code again if you need to use a short exit codes.