

# Morse conversion python practice

Purpose was to create simple python script, with variable technics, to read input from file and output to another. Needed to convert inputted english text to morse code and vice versa.

## Implementation

Dot was specified as separator between chars and just one dot in series. There was some unclear things in specification, agreed:

- dot is needed as char separator just in morse file
- spaces (word separator) from english can be mapped to morse like wanted, as long as it is documented. Now space is also space in morse side. For simplicity this is included in morse table so no extra code needed.

Dots are removed first with string split function, when converted from morse to english.

**NOTE: changed dot to space** to be like used elsewhere, and to check against some other converter (in testing used <https://morsecode.scphillips.com/translator.html>). Word and char separators are configurable, defined in **conf.py**.

Illegal characters in both directions are ignored and notified with prints to user, but they are not stopping execution. So all legal chars are translated.

Main module is for current command line and file specified implementation. Variables **input\_content** and **output\_content** can be used in implementations with different interfaces.

Doxygen documentation generated, can be opened with browser from **/d/index.html**.

## Usage

Put wanted text to input file. Run script:

```
>python morse_main.py
```

**This script converts english to morse code OR morse to english.**

**It reads input from file and writes output to file. Files and scripts must be in same folder.**

**File names and direction of conversion is asked from user. Or if just wanted to print morse table.**

**Give action: 'P'/'p': print morse table**

**'E'/'e': convert english -> morse code,**

**anything else: convert morse code->english**

**e**

**Give input file name: `ace_of_spades.txt`**

**Give output file name: `aos_morse.txt`**

Check output file content.

## Testing

Basically testing is done manually, defining input in output file, running script, checking possible error prints (mostly there is told not supported chars, but sometimes some fatal error) and output file. Converting back and checking against original file can be done to see if contents are the same.

I copied some text from internet for testing. With <https://morsecode.scphillips.com/translator.html> I feed text there and to own script, then converted back for comparing. It is difficult to compare when all is in same line, so I cutted output files manually as lines to see the difference. Seemed to work fine in my tests except chars ' and ! missing from own implementation. Explanation: web converted has enlarged set of morse codes (for example scandic):  
<https://morsecode.scphillips.com/morse.html>

Adding some more morse codes it would be possible to compare automatically results with that common converter. Same text feeded to both and results compared.

Some test files are found in **/Tests** folder.

I have not used any python test frameworks and no time for learning those for this. For example <https://docs.python.org/2/library/unittest.html>.

One idea was to feed automatically text to <https://morsecode.scphillips.com/translator.html> with python selenium script (found in test folder). I got input and output working but no time to continue further. Should be easy to feed same file inputs/outputs there.  
<https://docs.python.org/2/library/filecmp.html> could be comparing output (just True/False result).

Tested in win10 and linux.

All comments/ideas/questions are welcome:

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