

# SRT time shift

This script outputs shifted timestamps of an SRT subtitle file by x seconds. Redirect output into a new file, overwriting the existing file does not work.

usage:

```
#add 1 second
python3 srt_shift.py subtitle.srt +1 > subtitle_new.srt

#subtract 1 second
python3 srt_shift.py subtitle.srt -1 > subtitle_new.srt
```

[srt\\_shift.py](#)

```
#!/usr/bin/python

import sys
import re

def main():
    try:
        filename = sys.argv[1]
        shift = float(sys.argv[2])
    except (IndexError, ValueError):
        print("usage: srt-shift filename shift")
        return

    out = ''

    with open(filename, 'r') as file:
        i = 0
        for line in file:
            line = line.strip()
            if not line:
                out += '\n'
                continue

            i += 1

            if re.compile('^\d+$').match(line):
                i = 1

            if i == 1:
                out += '%s\n' % line

            elif i == 2:
                start, end = line.split(' --> ')
```

```
def parse_time(time):
    hour, minute, second = time.split(':')
    hour, minute = int(hour), int(minute)
    second_parts = second.split(',')
    second = int(second_parts[0])
    microsecond = int(second_parts[1])

    return (
        hour * 60 * 60 * 1000 +
        minute * 60 * 1000 +
        second * 1000 +
        microsecond
    )

start, end = map(parse_time, (start, end))

def shift_time(time):
    return time + shift * 1000

start, end = map(shift_time, (start, end))

def get_time(time):
    return (
        time // (60 * 60 * 1000),
        (time % (60 * 60 * 1000)) // (60 * 1000),
        (time % (60 * 1000)) // 1000,
        time % 1000,
    )

def str_time(time):
    return '%02d:%02d:%02d,%03d' % get_time(time)

out += '%s --> %s\n' % (
    str_time(start),
    str_time(end),
)

elif i >= 3:
    out += '%s\n' % line

print(out)

if __name__ == '__main__':
    main()

# vim: expandtab tabstop=4 shiftwidth=4
```

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<http://wuff.dyndns.org/> - **Wulf's Various Things**

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