

```
1: #!/usr/bin/python3
2: # -----
3: # Wachtwoord genereren.
4: # *** Leerobject voor Python. ***
5: # *** Gebruik Bitwarden voor wachtwoorden! ***
6: #
7: # Geschreven door Karel Zimmer <info@karelzimmer.nl>.
8: # Auteursrecht (c) 2020-2021 Karel Zimmer.
9: # GNU Algemene Publieke Licentie <https://www.gnu.org/licenses/gpl.html>.
10: #
11: # RelNum=02.00.08
12: # RelDat=2021-01-15
13: # -----
14: import os
15: import random
16: import argparse
17:
18: progname = os.path.basename(__file__)
19:
20: # Setup the command-line parsing module argparse.
21: parser = argparse.ArgumentParser(description='Wachtwoord genereren.',
22:                                 epilog="Typ 'man " + progname + "' voor meer "
23:                                       'informatie.')
24: parser.add_argument('-g', '--gui', action='store_true',
25:                    help='start in grafische modus')
26: parser.add_argument('-u', '--usage', action='store_true',
27:                    help='een korte gebruikssamenvatting tonen')
28: parser.add_argument('-v', '--version', action='store_true',
29:                    help='de versie tonen')
30: args = parser.parse_args()
31:
32: # Process input.
33: if args.usage:
34:     print(f""Gebruik: {progname} [-g|--gui] [-h|--help] [-u|--usage] \
35: [-v|--version]
36:
37: Typ '{progname} --help' voor meer informatie.""")
38: elif args.version:
39:     file = os.path.realpath(__file__)
40:     release_number = release_date = copyright_years = None
41:
42:     # Find release_number, release_date, and copyright_years in this script.
43:     with open(file) as f:
44:         datafile = f.readlines()
45:         for line in datafile:
46:             if 'Auteursrecht (c) ' in line and copyright_years is None:
47:                 data = line.split()
48:                 copyright_years = data[3]
49:             if '# RelNum=' in line and release_number is None:
50:                 data = line.split('=')
51:                 # e.g. data = ['# RelNum', '01.00.00\n'], remove \n.
52:                 release_number = data[1].rstrip('\n')
53:             if '# RelDat=' in line and release_date is None:
54:                 data = line.split('=')
55:                 # e.g. data = ['# RelDat', '1970-01-01\n'], remove \n.
56:                 release_date = data[1].rstrip('\n')
57:             if (release_number is not None
58:                 and release_date is not None
59:                 and copyright_years is not None):
60:                 break
61:
62:     print(f""{progname} {release_number} ({release_date})
63:
64: Geschreven door Karel Zimmer <info@karelzimmer.nl>.
65:
66: Auteursrecht (c) {copyright_years} Karel Zimmer.
67: GNU Algemene Publieke Licentie <https://www.gnu.org/licenses/gpl.html>.""")
68: else:
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69:     lower = 'abcdefghijklmnopqrstuvwxyz'
70:     upper = 'ABCDEFGHIJKLMNOPQRSTUVWXYZ'
71:     numbers = '0123456789'
72:     symbols = '[]{}()*;/, _-'
73:
74:     all = lower + upper + numbers + symbols
75:
76:     length = 16
77:
78:     password = ''.join(random.sample(all, length))
79:     print(password)
80:
81: # Een non-gui script gestart met optie gui.
82: if args.gui:
83:     input('Druk op de Enter-toets om verder te gaan [Enter]: ')
84:
85: # EOF
```