```
In [13]:
              #Text to Brail on python
              import time
           3
              start = time.time()
              translate = input('Text you would like to translate (written as a string): ');
              import numpy as np
              list2 =[[],[],[]];
           7
              list1 = list(translate)
           8
              characters = len(translate);
          10
              # Lowercase Letters
              a = [['10'], ['00'], ['00']];
          11
              b = [['10'], ['10'], ['00']];
          12
              c = [['11'],['00'],['00']];
          13
              d = [['11'],['01'],['00']];
          14
              e = [['10'],['01'],['00']];
          15
          16
              f = [['11'],['10'],['00']];
              g = [['11'],['11'],['00']];
          17
              h = [['10'],['11'],['00']];
          18
              i = [['01'],['10'],['00']];
          19
              j = [['01'],['11'],['00']];
          20
              k = [['10'], ['00'], ['10']];
              1 = [['10'],['10'],['10']];
              m = [['11'],['00'],['10']];
              n = [['11'],['01'],['10']];
              o = [['10'], ['01'], ['10']];
              p = [['11'],['10'],['10']];
          27
              q = [['11'],['11'],['10']];
          28
              r = [['10'],['11'],['10']];
              s = [['01'],['10'],['10']];
          29
              t = [['01'],['11'],['10']];
          30
          31
              u = [['10'],['00'],['11']];
              v = [['10'],['10'],['11']];
          32
              w = [['01'],['11'],['01']];
          33
              x = [['11'],['00'],['11']];
          34
              y = [['11'],['01'],['11']];
          35
              z = [['10'],['01'],['11']];
          36
          37
              # Punctuation
                         = [['00'],['00'],['01']];
          38
              capital
          39
                           = [['00'],['10'],['11']];
              question
          40
              exclamation = [['00'],['11'],['10']];
          41
              underscore = [['00'],['00'],['11']];
                           = [['00'],['11'],['01']];
          42
              period
                           = [['00'],['11'],['01']];
          43
              comma
                           = [['00'],['11'],['00']];
= [[' '],[' '],[' ']];
          44
              colon
          45
              space
          46
          47
              # Numbers
              number = [['01'],['01'],['11']];
          48
          49
                       = [['01'],['11'],['00']];
                       = [['10'],['00'],['00']];
          50
                            '10'],['10'],['00']];
          51
                       = [[
                      = [['11'],['00'],['00']];
          52
              three
                       = [['11'],['01'],['00']];
          53
              four
                       = [['10'],['01'],['00']];
          54
              five
                       = [['11'],['10'],['00']];
          55
              six
              seven = [['11'],['11'],['00']];
          56
                    = [['10'],['11'],['00']];
          57
              eight
                      = [['01'],['10'],['00']];
          58
              nine
          59
          60
              counter=0
          61
              while counter in range(len(list1)):
          62
             #Small Tattara
```

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Text to brail on python (Andualem)

In []: 1

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