

1) Read the attached text written by Gauss in 1801 proving the existence of primitive roots modulo p (prime) and re-write it briefly in your own words using modern notation and mathematical symbols. *Allowed languages: English, Italian and Spanish.*

2) Find the secret string of characters `text` knowing that the output of the following lines

```
for c in text:
    k = floor( 1000*random() )
    print Mod(17,911)^k, ord(c)*Mod(123,911)^k
```

has been:

```
4 712 604 166 196 535 46 401 394 211 563 141 410 854 319 859 797 735 126 630 412 574 105
849 747 291 808 610 305 549 459 151 535 867 896 364
```