1.

N = 234841136411758273000763594354834942653

e = 65537N = p \* q

p = 14086963408384851001

q = 16670813262138239653

phi = (p-1)(q-1) = N – p – q + 1 = 234841136411758272970005817684311852000

de mod phi = 1

d = 131139372709478882400526464589358085473

2.

openssl genrsa -out alice\_sk.pem 2048

openssl rsa -text -in alice\_sk.pem -out alice\_p.pem

65537

openssl genpkey -algorithm RSA -out alice\_sk\_aes.pem -aes256 -aes-256-cbc -pass pass:parola