

Deszyfrowanie

- $m \equiv c^d \pmod{N}$
- $c = 49$
- $N = 55$
- $d=27$
- $49^{27} \pmod{55} =$
4318114567396436564035293097707728087552
248849 $\pmod{55} = \mathbf{14 = m}$

Encoded Key:

```
-----BEGIN RSA PRIVATE KEY-----
MIIEpAIBAAKCAQEAYB8IehMJs+roy3yTxPb+6kUbQyQRim3a6AxFdjbL08Zvvd12
n2OreTCknB9Zme9kyZN7nkM7CdOMJ4uEqiVpc1VSagAGucbsfuFYGlRt6ZCE5z/m
cFOD9223JPjmH3aLbvtUk1znqnc1zlj1BwlpFFHLOqCwa0+7NK6PfoKB7u3ax7fx
lpUmed6PUv+qQClS+tACmboRRpZl0juXc+8hsQsUSofQePt7htSEnxMw5pMkbw57
sPvtDIwKiLS4MhHrvIJ6n0aQ0Z6jryAkqKbXdt0jl63c11bW9aefXMxxpClKg/WA
EpmI08fJA20KHfFKCAJ394kk9yvNbnqzT6y/FwIDAQABAoIBAHFWAfsA5THcDFOS
Di4ypFQRJ21uA/EeHiflK0Gz7o2/6HDjB9d1HyvXfKJeruQbTD1NJWmQMdNy16Fd
xpiF756955rYwPZdznPdLQRcZJMuodZFvkBHTCnJHTv3Kn0PKhCEjnWW3C0Sropa
lfrSPYygdjSR5NbJToCbi+/2Fn41fjt0LTDiBvBTHF10pxR7jpRfhbm95tmic86K
HiczMDtj/1468Apm22DngNjG66HV02Ajcyc8+SMQaSLVxaLlcAVQVfRwvUXno1Jp
f5gI16sUXs2LPKpcLfJjKxBS2ltDNTHd6lbmfYE8yOLaNOUfgOZyJ6+2FK8Ypxhv
rhy8H2ECgYEA7xVbkr9gFQZmWnaGGrJrBahVdTO+k2+C4MF2kWJoCkak17S7+MoR
uQOcewk5DY998B+fdSXCA35fMTTHgF8KUKKrdJGphHJZQnaW2C7foM/p6FCC7Pf+
U8irrCwLM9MPMMf36XYVkyQrHicv8cU5WgYhD6w016v8ibsABM/EqSsCgYEA1kfu
yGQoro4iWB4I1JS0pLx2O+QmeK81TX08ML1mJ2ZJugLKx0k6IJfnRZcDMBvWu+zW
-----
```

Decoded Key:

```
Private-Key: (2048 bit)
modulus:
  00:c8:1f:08:7a:13:09:b3:ea:e8:cb:7c:93:c4:f6:
  fe:ea:45:1b:7f:24:11:8a:6d:da:e8:0c:45:76:36:
  cb:3b:c6:6f:bd:dd:76:9f:63:ab:79:30:a4:9c:1f:
  59:99:ef:64:c9:93:7b:9e:43:3b:09:d3:8c:27:8b:
  84:aa:25:69:73:55:52:6a:00:06:b9:c6:ec:7e:e1:
  58:1a:54:6d:e9:90:84:e7:3f:e6:70:53:83:f7:6d:
  b7:24:f8:e6:1f:76:8b:6e:fb:54:93:5c:e7:aa:77:
  35:ce:58:e5:07:09:69:14:51:cb:3a:a0:b0:68:ef:
  bb:34:ae:8f:7c:e9:01:ee:ed:da:c7:b7:f1:d6:95:
  26:79:de:8f:52:ff:aa:40:29:6c:fa:d0:02:99:ba:
  11:46:96:65:3a:3b:97:73:ef:21:b1:0b:14:4a:87:
  d0:78:fb:7b:86:d4:84:9f:13:30:e6:93:24:6f:0e:
  7b:b0:fb:ed:0c:8c:0a:88:b4:b8:32:11:eb:bc:82:
  7a:9f:46:90:d1:9e:a3:af:20:24:a8:a6:d7:0e:dd:
```

Zakodowany i

odkodowany klucz RSA