1.利用 n不互素，求出p,q,r

```
q=libnum.gcd(n1,n2)
p=n1//q
r=n2//q
```

2.利用剩余扩展定理求出c

```
c=crt([c1,c2],[n1,n2])
```

3.e和phi不互素，求m

```
phi=(p-1)*(q-1)*(r-1)
d,s,s1=libnum.xgcd(e,phi)

m=pow(c,d,p*q*r)
print(m)
m=libnum.nroot(m,s1)
print(m)
```

4.利用威尔逊定理求出flag

```
for i in range(q-b+1,q-1):
    m=(m*i)%q
for i in range(p-a+1,p-1):
    m=(m*i)%p
print(m)
print(libnum.n2s(int(m)))
```

sage 完整脚本如下

```
n1=
19043131323355533325636856402245013161950603870392914542584526572998215386267359894936339831667201042179068507242974229053862501188153907837783731309825012161865658062184137068103737378268120527325153162 27
```

```
n2=
208121240278731450076225253290475433637306310813232376391340812491628332631131108624766
815339784577624060742338632039555271287282674848803620005770218691182695527520517137943
646764396650730387941271538841 7
c1=
146822144924317933479803034634922706093216428349697245803232931101484754036831548165333
255387044190888525919724536111520190503320074503845896398342343466020973345780819882902
367082602135401975062012075491
c2=
156720697144755673250540534754429947200826856466530794608879236070009526121610245733478
080490567709177288189215486237742526865842535074841869059917468229854686252864942090980
937561910707085436578571202866 6

a=3767
b=3691
e = 65535
import libnum
q=libnum.gcd(n1,n2)
p=n1//q
r=n2//q
phi=(p-1)*(q-1)*(r-1)
d,s,s1=libnum.xgcd(e,phi)
c=crt([c1,c2],[n1,n2])
m=pow(c,d,p*q*r)
print(m)
m=libnum.nroot(m,s1)
print(m)
for i in range(q-b+1,q-1):
    m=(m*i)%q
for i in range(p-a+1,p-1):
    m=(m*i)%p
print(m)
print(libnum.n2s(int(m)))
```