

# CTF之这次的题都不会

原创

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这还只是题目, 等我会做了再写!!

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## 一、bd

维纳攻击, 首先从github上面下载攻击脚本: <https://github.com/pablocelayes/rsa-wiener-attack>

然后编写攻击脚本:

```

from Crypto.Util.number import *
import ContinuedFractions, Arithmetic, RSAvulnerableKeyGenerator

def hack_RSA(e,n):
    '''
    Finds d knowing (e,n)
    applying the Wiener continued fraction attack
    '''
    frac = ContinuedFractions.rational_to_contfrac(e, n)
    convergents = ContinuedFractions.convergents_from_contfrac(frac)

    for (k,d) in convergents:

        #check if d is actually the key
        if k!=0 and (e*d-1)%k == 0:
            phi = (e*d-1)//k
            s = n - phi + 1
            # check if the equation x^2 - s*x + n = 0
            # has integer roots
            discr = s*s - 4*n
            if(discr>=0):
                t = Arithmetic.is_perfect_square(discr)
                if t!=-1 and (s+t)%2==0:
                    print("Hacked!")
                    return d

if __name__ == "__main__":
    c = 37625098109081701774571613785279343908814425141123915351527903477451570893536663171806089364574293449414
5616304853122470616861913666694043891423479725650205708771759920980337594033184437057918669393630619665382107586
11679849037990315161035649389943256526167843576617469134413191950908582922902210791377220066
    e = 46867417013414476511855705167486515292101865210840925173161828985833867821644239088991107524584028941183
2167351159863137199664586088816898023771816331113899208138143509643154204222570502875178512131094658234447678958
17372377616723406116946259672358254060231210263961445286931270444042869857616609048537240249
    N = 86966590627372918010571457840724456774194080910694231109811773050866217415975647358784246153710824794652
8403063894287299237714313406993463546467083965642039572703938821050427149200600554015417947484372427071861929415
46185666953574082803056612193004258064074902605834799171191314001030749992715155125694272289
    d = hack_RSA(e, N)
    m = pow(c, d, N)
    flag = long_to_bytes(m).decode()
    print(flag)

```

运行后获得答案:

## 二、逆转思维

## 逆转思维?

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实训描述: 你知道php伪协议、文件包含漏洞、反序列化吗?

实训环境: [创建环境](#)

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### 三、ezrsa

#### ezrsa?

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实训描述: Related Message Attack, 最后以SeBaFi{}的形式提交得到的{}中的内容。

实训附件: [下载](#)

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### 四、GM

#### GM?

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实训描述: RSA题目, 最后以SeBaFi{}的形式提交得到的{}中的内容。

实训附件: [下载](#)

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