

```
Python 3.8.2 Shell
File Edit Shell Debug Options Window Help
Python 3.8.2 (tags/v3.8.2:7b3ab59, Feb 25 2020, 22:45:29) [MSC v.1916 32 bit (Intel)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>> def a_pow_n(a,n):
    #return a^n, where a:base,n:power
    y,x=1,a
    while n>0:
        if n%2 ==1:
            y=y*x
            x=x*x
            n=n//2
    return y

>>> a_pow_n(1013,419)
22405653013340406314151345781876843560122551559500779953590249754235318376624469
03105694108693673163702643664991815403766897275327722317342407719078641524809289
79353868361759455888851516001166575493240297955745240659499754995331761683740706
29673220949559109020675154620486237964644007536842958954443581757883492731492132
54715824741381734737735014037730861652768113183372636644505565439147530182945832
60603863466885922903189232958848729458689482297985676410157391249495880375006104
69921990289565552072941679472396360550124009274671784556459084489081663109245640
66151056165135695034970394183617048406461682607078078673058816509548798431682899
97986443419537742204499583104903972358007395431622523562190501252959332129182097
42527958652709544931784310887341902389872492121623113812721823882638503558919426
10376360649454951147740983253494772614794597893059113792752868986732418911264842
69817249257278352891415904074345576878139248871230490110609506286174253787368019
03200766011873541103553144398165556809904973436867322235825948144237928660621643
23452070868341131446949204293222499462885385814210099825127401066131360831605967
06134953753431568060050765050053942837161772826838895157654256189406183549366062
626611689159708881125001053000549223741280282670493954713677
>>>
```



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```
>>> def return_factorizer(n):  
    for i in range(1,n+1):  
        if n%i==0:  
            print(i)
```

```
>>> return_factorizer(231358069909)
```

```
1  
480787  
481207
```