1.) If you haven't already had the chance run the code [minicrypto/code/decypher.py]
You may need to copy it from github if you don't have a github clone

Please take note of three things:

Remember the algorithm icon we used in the slides

A.) Note that the algorithm itself is in a function called decrypt. This is the actual function you'll need.

B.) Note the small encrypted text. We've seen it before in the slides:

CFFG

```
def decrypt(text, shift):
    cyphertext=''
    for char in text.lower():
        #don't bother with space
        if 'a' <= char <= 'z':
            cyphertext += chr((o
        else:
            #don't bother with s
            cyphertext += char
    return cyphertext

if __name__ == "__main__":
    text='cffg'
    print decrypt(text,1)
```

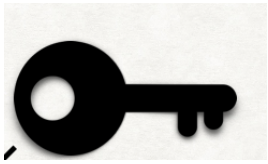
A

B

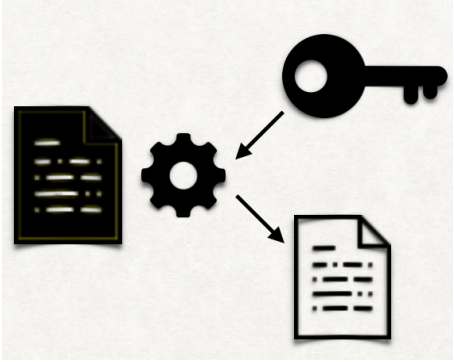
C

C.) Note that we are passing the "decrypt" function the encrypted text and a shift key number

decrypt(text,1)



2.) We now have the basic pieces of the process.



3.) Think about decrypt(text,1) and answer the following questions for yourself.

Questions:
Do you think all encrypted text you will encounter will only be Caesar shifted 1 space?

How many possible keys could there be?

4.) Manually edit decrypt.py in order to decrypt /minicrypto/blob/master/ciphertext/text1.txt. It will likely not have a key=1.

Take note of what key number cracks text1.txt

5.) Once you've cracked text1.txt. Start working with minicrypto/code/loopdecypher.py

Note the following things:

```
text='nbyly qum uh ifx qiguh qbi fcpyx ch u mbiy.  mby bux mi guh

for i in range(1,4):
    print 'Cipher Shift Attempt ',i,':',
    print decrypt(text,i)
    command = raw_input('press Enter to contine OR q to quit when
    if command == 'q':
        print '\n'
        print 'It took ',i,'tries to crack this code.'
        break
```

A.) Look at that `for i in range(start,stop)` code. It's going to save you typing and loop from start to stop.

B.) Notice the printout/prompts wrapped around *decrypt()* .

C.) Notice it's the good old text1.txt

Questions:
Do you want to loop through just that range of keys?

6.) Run loopdecypher.py

7.) Replace the text variable in loopdecypher with the text from /minicrypto/blob/master/ciphertext/text2.txt. Decrypt it

8.) Replace the text variable in loopdecypher with the text from /minicrypto/blob/master/ciphertext/text3.txt. Decrypt it