

vigenere

TODO

- get the key
- get the plaintext
- encipher
- print ciphertext

get the key

C

```
argv[1]
```

```
isalpha
```

Python

```
sys.argv[1]
```

```
isalpha
```

TODO

- get the key
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prompt user

C

- `get_string`
- `#include <cs50.h>`

Python

- `get_string`
- `import cs50`

TODO

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for loop: Python

```
name = "Zamyla"
```

```
for c in name:  
    print(c)
```

$$c_i = (p_i + k_j) \% 26$$

- c_i : i^{th} letter of ciphertext
- p_i : i^{th} letter of plaintext
- k_j : j^{th} letter of key
- $\% 26$: remainder after dividing by 26

encipher

- advance to the next letter in the keyword only if the character in plaintext is a letter
 - `isalpha`
- preserve case
 - `isupper`, `islower`

ASCII \Leftrightarrow alphabetical?

C

- ...

Python

- ord
- chr

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this was vigenere