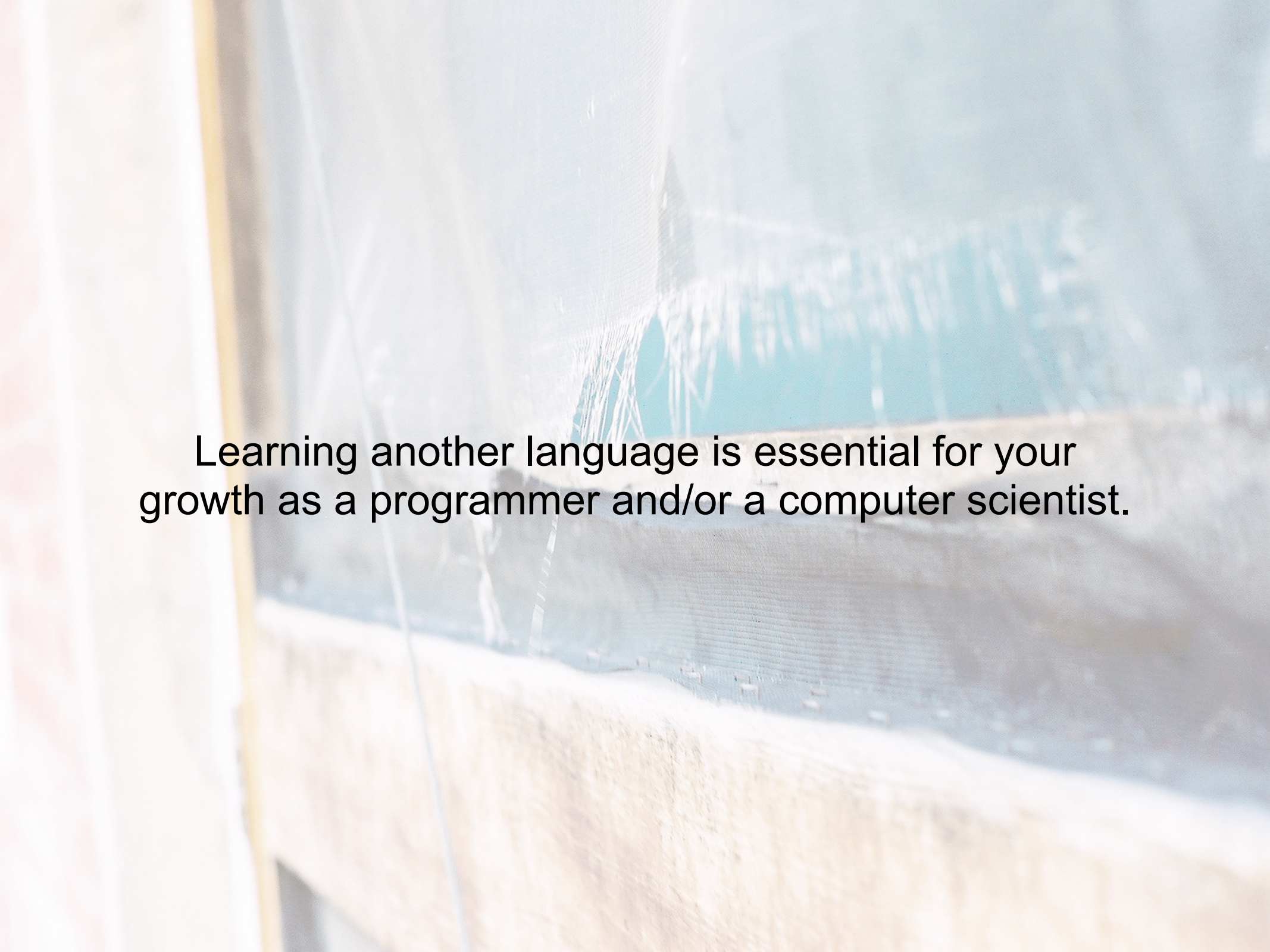
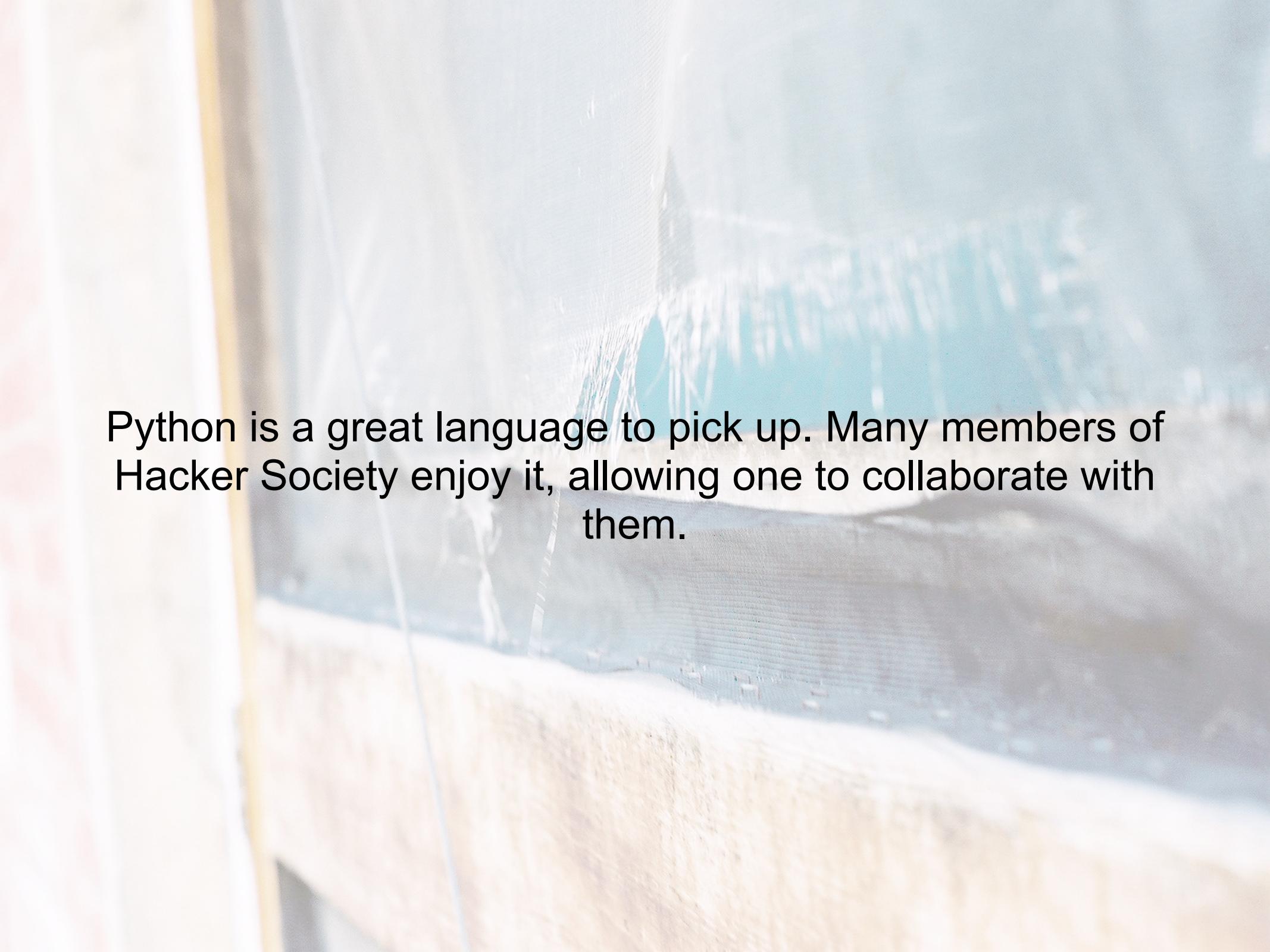
Basic Programming

using Python

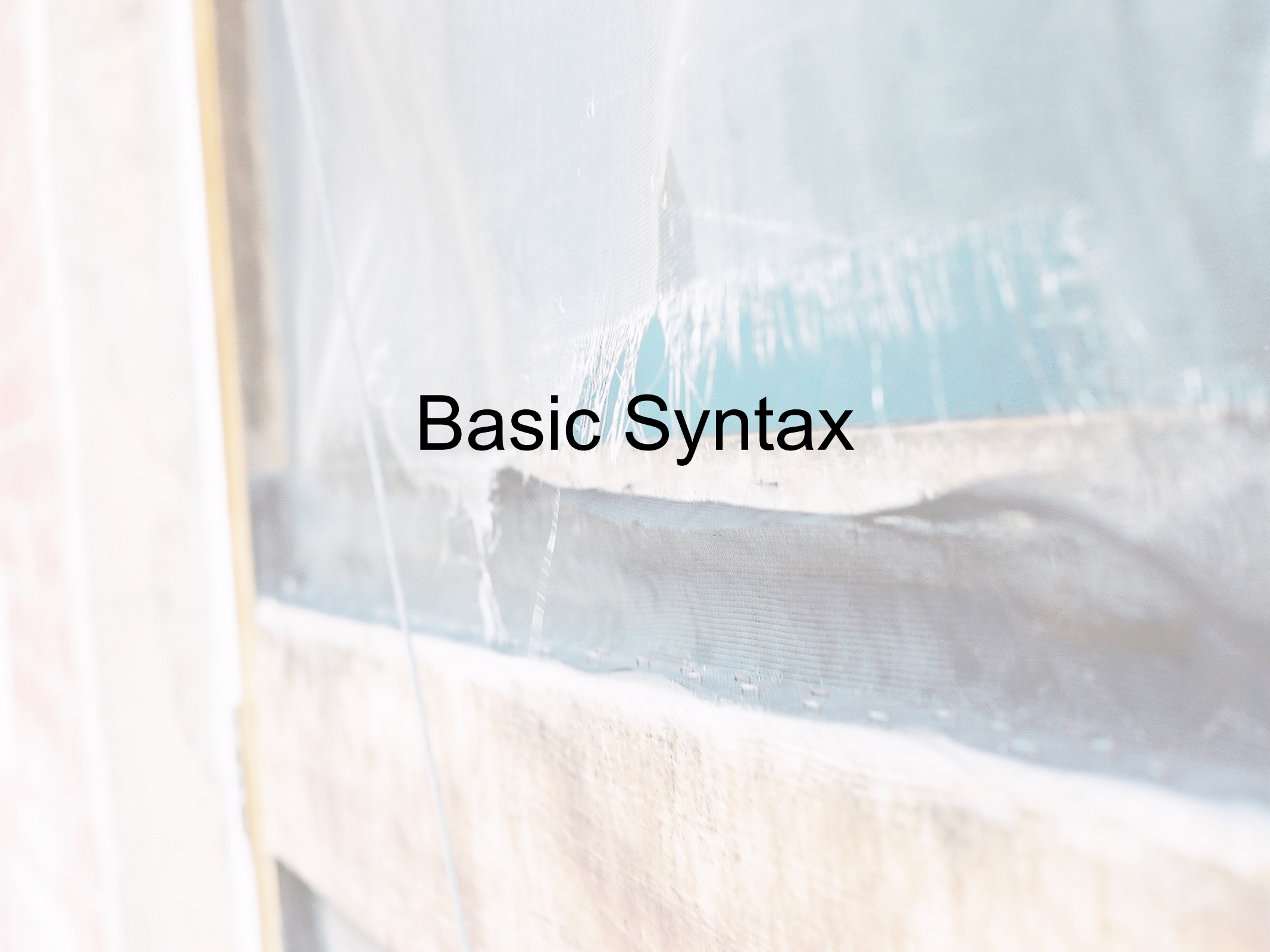

Learning another language is essential for your
growth as a programmer and/or a computer scientist.

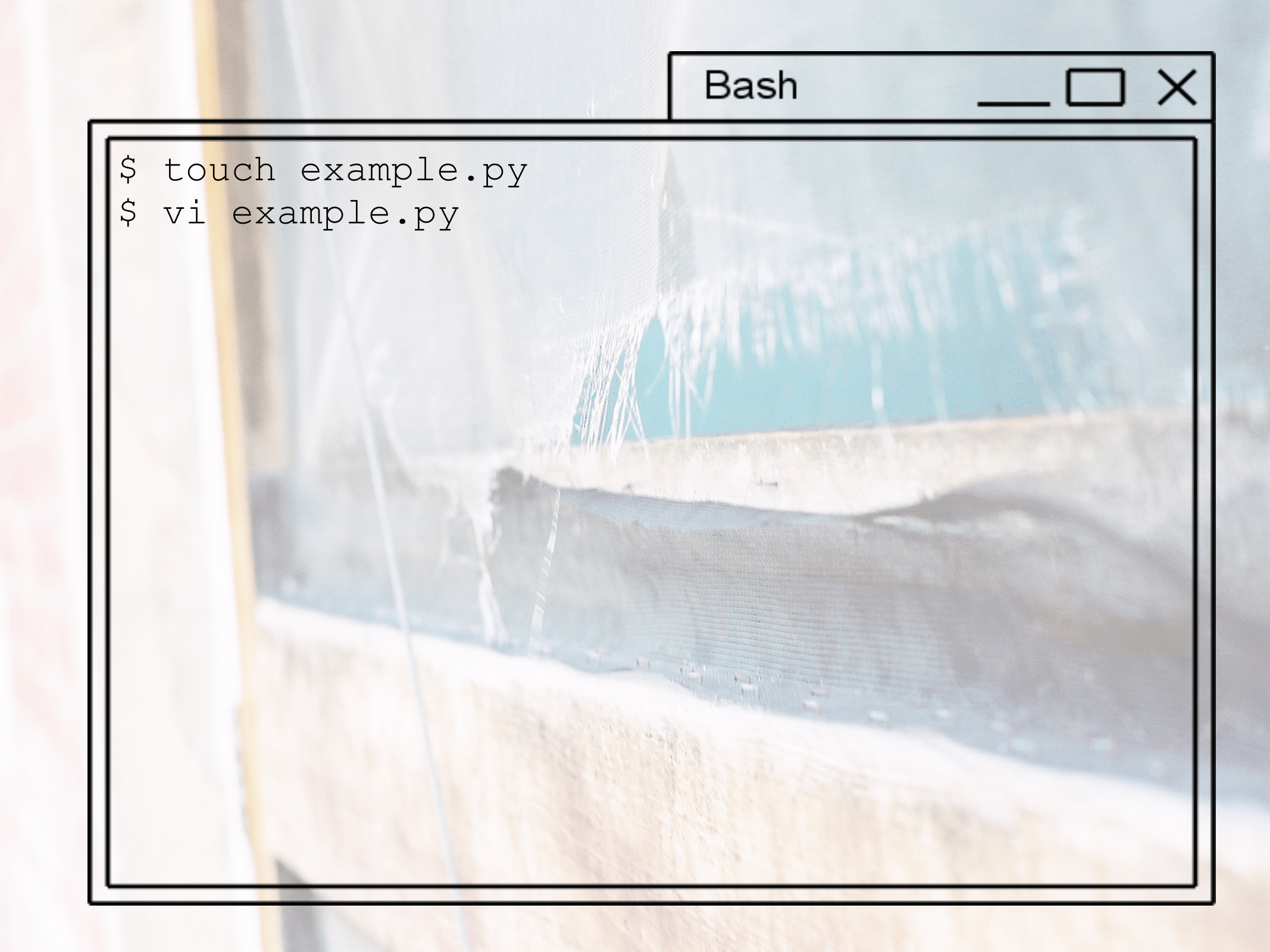


Python is a great language to pick up. Many members of Hacker Society enjoy it, allowing one to collaborate with them.

Links

- http://python.org/ # official site
- http://diveintopython.org/ # free book
- http://proquest.safaribooksonline.com/book/programming/python/9780596805395 # Learning Python (use vpn)
- http://proquest.safaribooksonline.com/book/programming/python/0132269937 # Core Python Programming (use vpn)


Basic Syntax


Bash
$ touch example.py
$ vi example.py

vi example.py

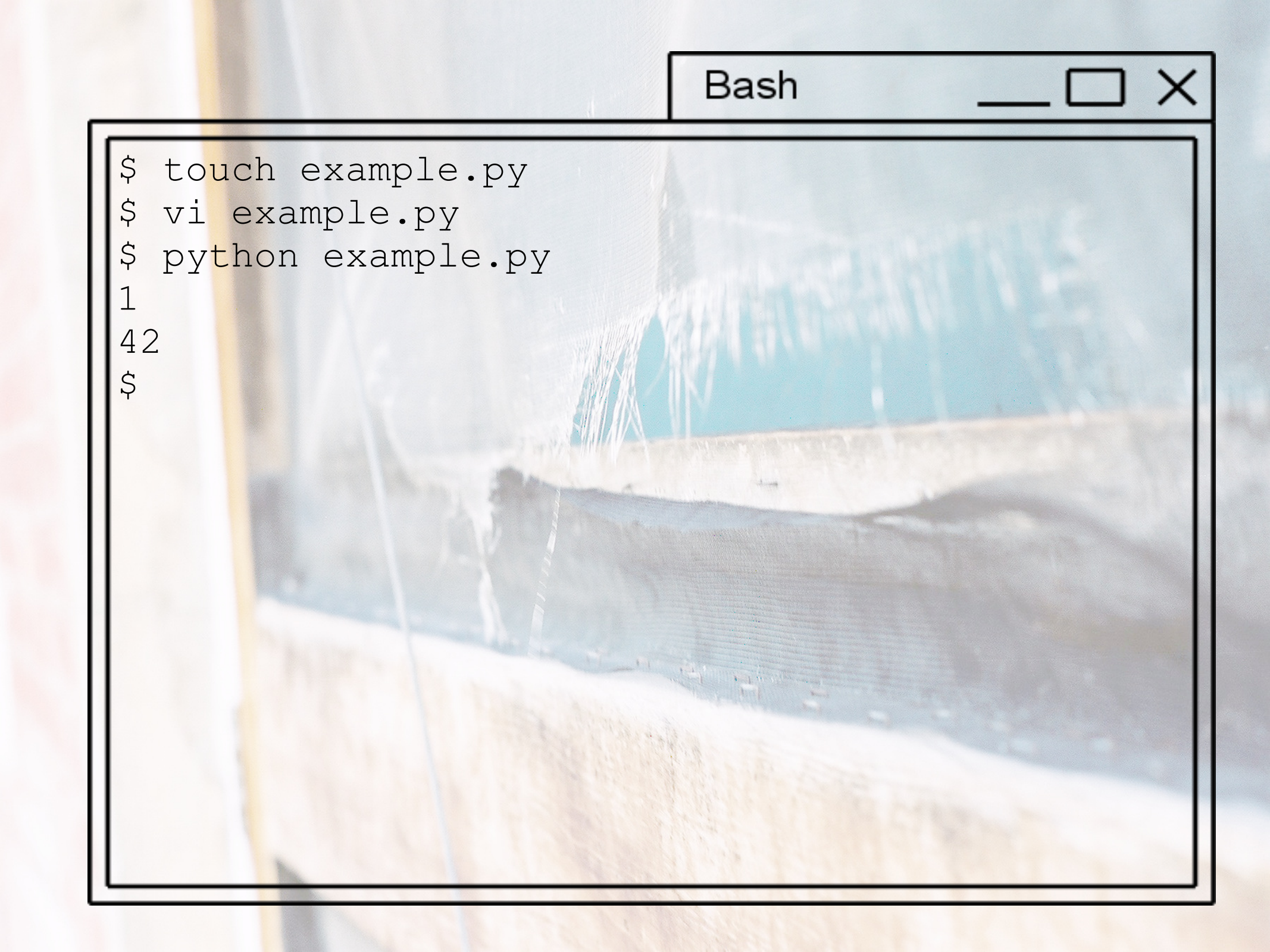
```
#!/usr/bin/env python

## These are comments

x = 1 # there are no variable 'declarations'
print x

# print y
# However you do need to instantiate a
# variable before you use it.

print (x + 5) * 7 # math works as you would
                  # expect
```


Bash
$ touch example.py
$ vi example.py
$ python example.py
1
42
$


Bash
$ touch strings.py
$ vi strings.py

vi strings.py

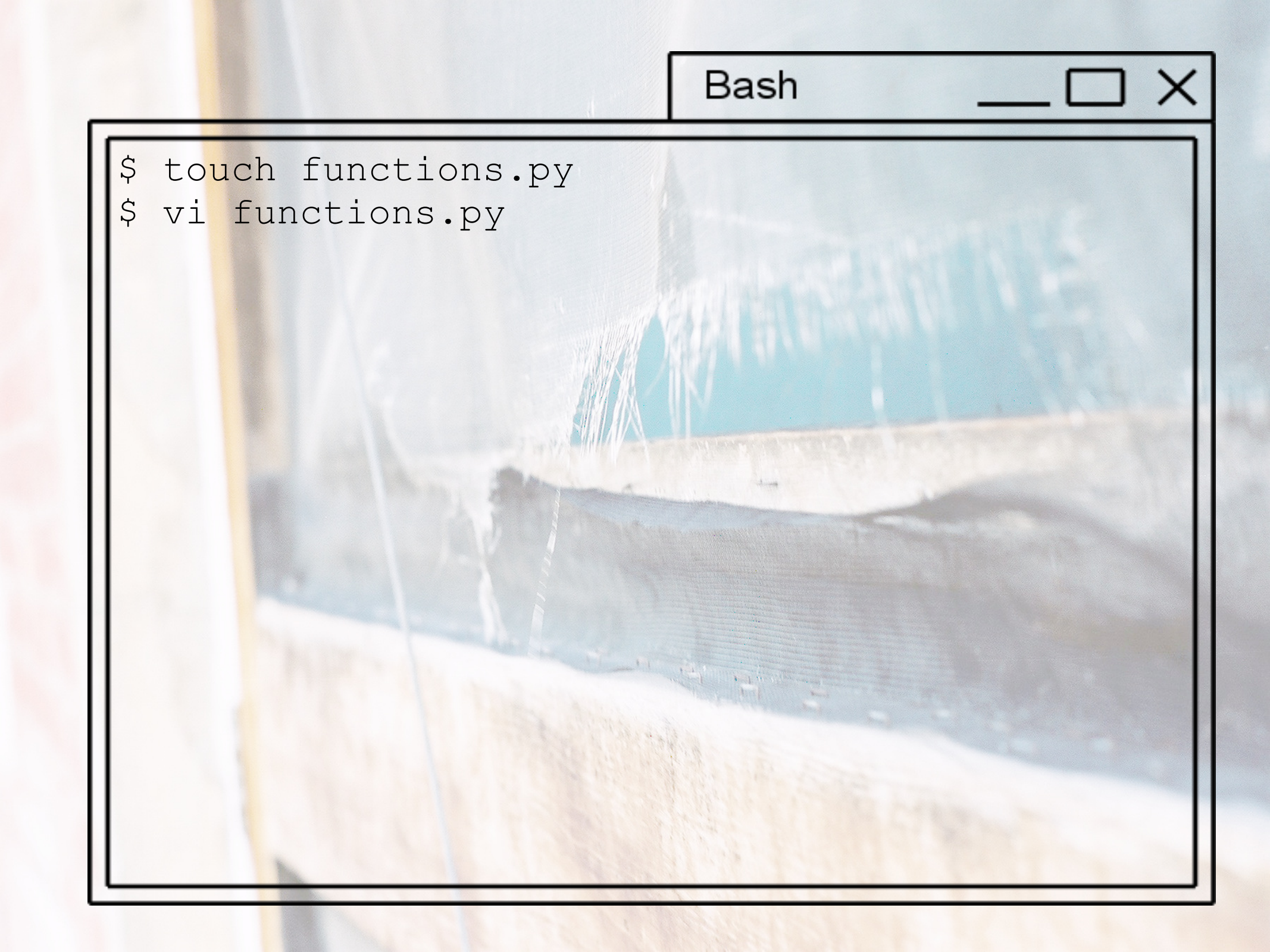
```
#!/usr/bin/env python

string_1 = 'hello world'
string_2 = "hello world"

print string_1 == string_2

print string_1.split(' ')
```


Bash
$ touch strings.py
$ vi strings.py
$ python strings.py
True
['hello', 'world']

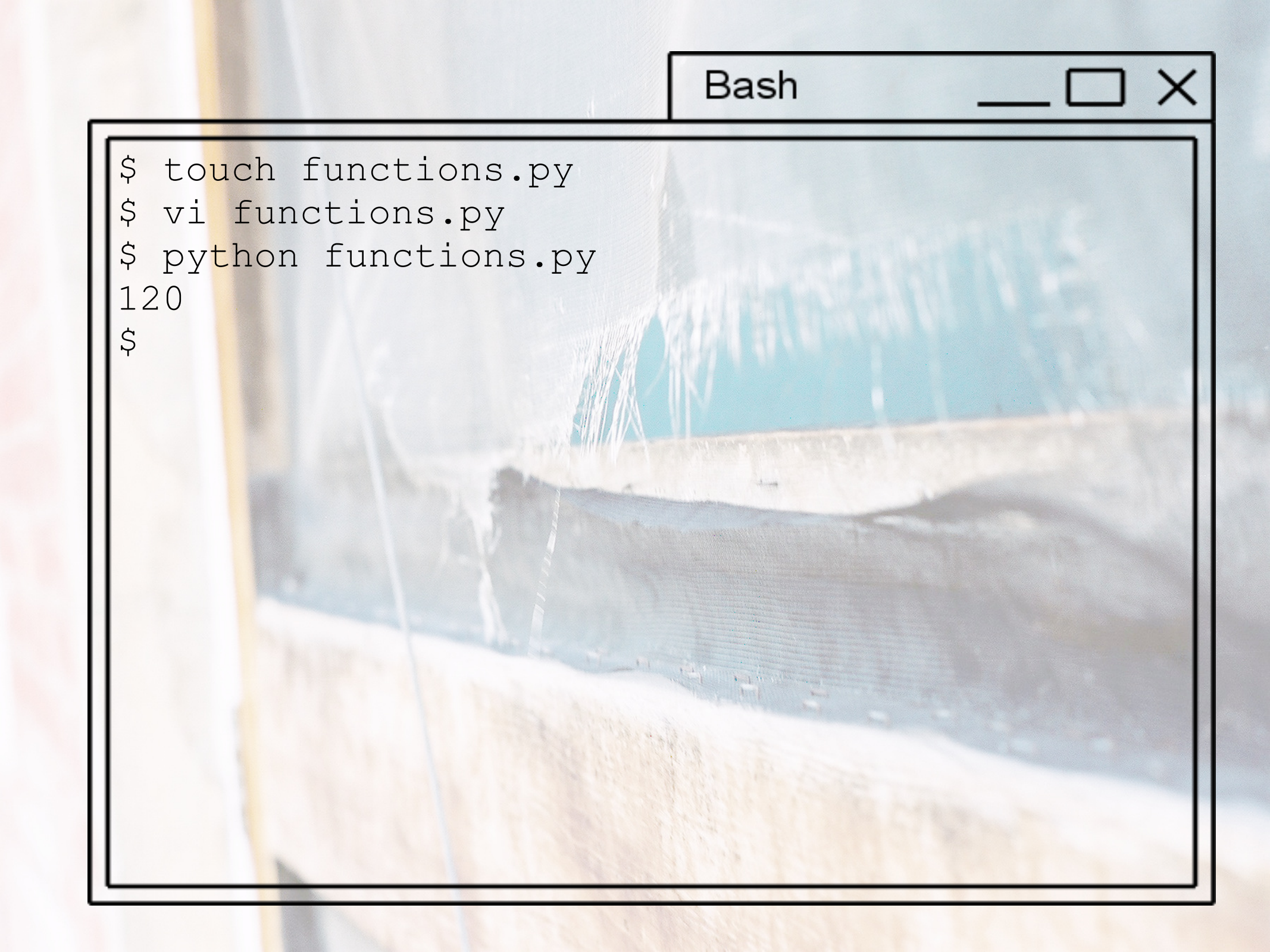

Bash
$ touch functions.py
$ vi functions.py

vi functions.py

```
#!/usr/bin/env python

def factorial(n):
  """
  Computes the factorial function recursively.
  """
  if n > 1:
    return n * factorial(n-1)
  else:
    return 1

print factorial(5)
```


Bash
$ touch functions.py
$ vi functions.py
$ python functions.py
120
$


There is a lot more,
see the links page