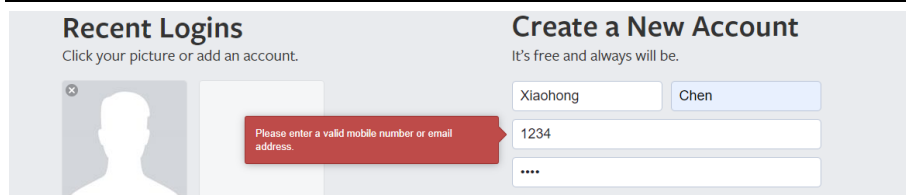


Why use Exceptions?

Case 1: sign up in Facebook

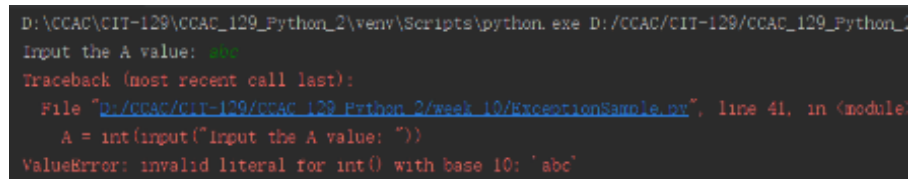


The screenshot shows the Facebook sign-up interface. On the left, under 'Recent Logins', there is a placeholder for a profile picture and a red error message: 'Please enter a valid mobile number or email address.' On the right, under 'Create a New Account', there are input fields for 'Name' (containing 'Xiaohong'), 'Email or phone number' (containing '1234'), and 'Password' (containing '****'). A 'Sign Up' button is visible.

Case 2: calculate A * B in Python (What if A=abd or B=cfg?)

while True:

```
a = int(input("Input the a value: "))
b = int(input("Input the b value: "))
c=a*b
print(c)
```



The screenshot shows a terminal window with the following text:
D:\CCAC\CIT-129\CCAC_129_Python_2\venv\Scripts\python.exe D:/CCAC/CIT-129/CCAC_129_Python_2/week_10/ExceptionSample.py
Input the A value: abd
Traceback (most recent call last):
File "D:/CCAC/CIT-129/CCAC_129_Python_2/week_10/ExceptionSample.py", line 41, in <module>
A = int(input("Input the A value: "))
ValueError: invalid literal for int() with base 10: 'abd'

Q:When an error or exception occurs, Python will normally stop and generate an error message. However, what should we do if we hope that python or website work as usual instead of discontinuing?

A: Using an exception handler(try statement) to catch and respond to the errors or ignore the exceptions.

1.try/except Catch and recover from exceptions raised by Python, or by you.

while True:

try:

```
A = int(input("Input the A value: "))
B = int(input("Input the B value: "))
C = A * B
print(A,"*",B,"=",C)
```

except ValueError:

print("-- Please input an int type value--")

2.try/finally finally block gets executed no matter if the try block raises any errors or not

while True:

try:

```
A = int(input("Input the A value: "))
B = int(input("Input the B value: "))
C = A * B
print(A,"*",B,"=",C)
```

except ValueError:

print("--Please input an int type value--")

finally:

print("--Next calculation will begin! --")

3.raise (extension exercise) Trigger an exception manually in your code.

class myError(Exception): pass

try:

raise myError

except myError:

print("--executed or not?--")