

Errors that will show up if you doesn't follow Python Syntax Rules

```
print("You missed the closing round braces "
```

```
print("You missed the closing round braces "  
^
```

```
SyntaxError: invalid syntax
```



Errors detected during execution are called **Exceptions**

```
print (firstname);
```

```
NameError: name 'firstname' is not defined
```



Handling Exceptions

try: -----> Put the code that you want to handle its exceptions

`doTry()`

except: -----> Handle the exception if it raised in the try clause

`doExcept()`

finally: -----> Put the code that you want to run always if there is an exception or not.

`doFinally()`



Handling Exceptions

```
try:
    for i in range(3):
        print(3/i)
except ValueError:
    print("Value Error")
except ZeroDivisionError:
    print("you divided by 0")
finally:
    print("this will print no matter what")
```



```
raise ErrorName (error_message)
```

i.e. **raise** **NameError**("It's Not a name")



File Input & Output

File Authoring



Open Files

```
open (file_name, mode)
```

mode	Job description
r	Open Files for reading only
w	Open Files for writing only *
a	Open Files for appending *
r+	Open Files for reading and writing *
rb	Open Files for reading binary files
rb+	Open Files for reading and writing binary files *
* If the file not exist , It will create it.	



Read Files

```
f1 = open("some_file.txt", 'r')
```

```
f1.read()
```

```
#output: Some text on line 1.  
         Other text on line 2.
```

```
f1.read(4)
```

```
#output: Some
```

```
f1.readline()
```

```
#output:  text on line 1.
```

```
f1 = open("some_file.txt", 'r')
```

```
for line in f1:
```

```
    print(line)
```

```
#output: Some text on line 1.  
         Other text on line 2.
```

some_file.txt

Some text on line1.

Other text on line2.



```
f1 = open("some_file.txt", 'w')
```

some_file.txt

Some text on line1.

Other text on line2.



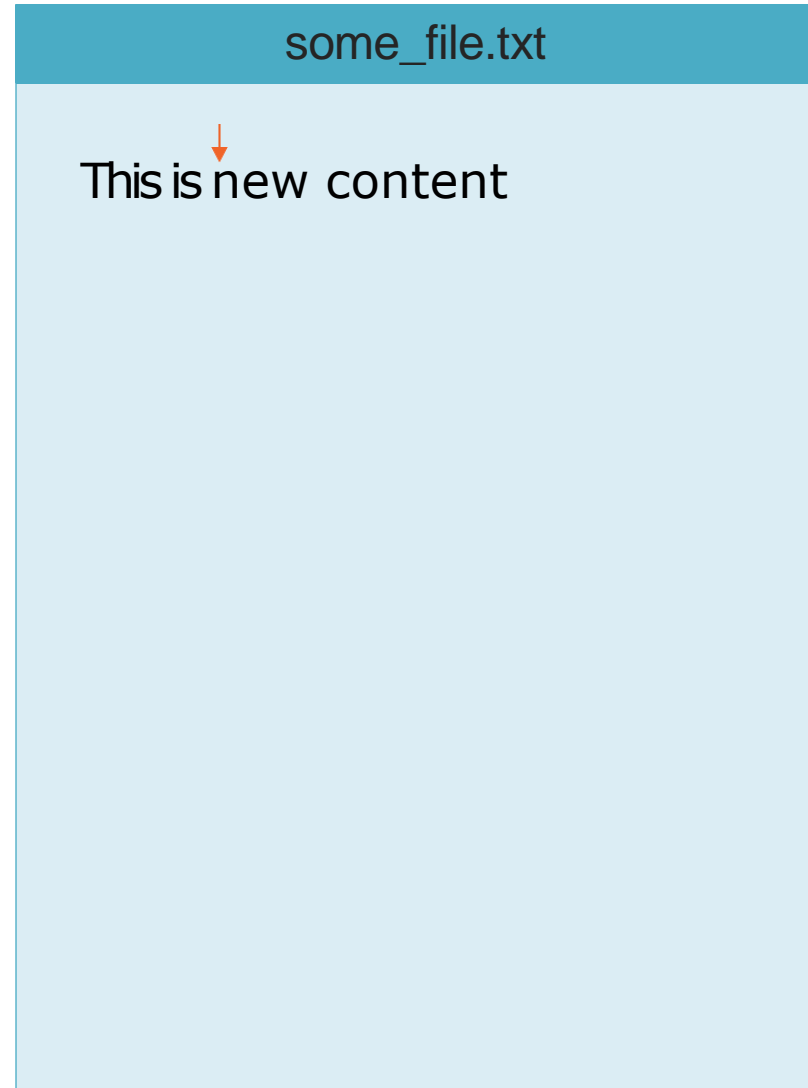
```
fl = open("some_file.txt", 'w')  
fl.write("This is new content")
```

some_file.txt

This is new content



```
f1 = open("some_file.txt", 'w')  
f1.write("This is new content")  
f1.seek(8)
```



Write on Files

```
fl = open("some_file.txt", 'w')  
fl.write("This is new content")  
fl.seek(8)  
fl.write("old")
```

some_file.txt

This is old content



Write on Files

```
f1 = open("some_file.txt", 'w')
f1.write("This is new content")
f1.seek(8)
f1.write("old")
f1.close()

f1 = open("some_file.txt", 'a')
f1.write("\n content is appended")
```

some_file.txt

This is old content
content is appended

