# PYTHON BUILT IN ERRORS

## ZeroDivisionError

### Description:

Caused by the dividend being divided by zero.

### Example causing code:

a = 0  
b = 3  
c = b / a

### Solution code:

a = 0  
b = 3  
try:  
 c = b / a  
except ZeroDivisionError:  
 print("Do something nice")

## IndexError

### Description:

Caused by referencing a list index that doesn’t exist.

### Example causing code:

my\_name = ["darren", "halpin"]  
print(my\_name[2])

### Solution code:

my\_name = ["darren", "halpin"]  
try:

print(my\_name[2])

except IndexError:

print("Do something nice")

## KeyError

### Description:

Caused by referencing a dictionary key that doesn’t exist.

### Example causing code:

my\_name = {"first": "darren", "last": "halpin"}  
print(my\_name["middle"])

### Solution code:

my\_name = {"first": "darren", "last": "halpin"}  
try:

print(my\_name["middle"])

except KeyError:

print("Do something nice")

## FileNotFoundError

### Description:

Caused by trying to access a file or directory that doesn’t exist.

### Example causing code:

file = open("some\_file.txt")

### Solution code:

Try:  
 file = open("some\_file.txt")  
except FileNotFoundError:  
 print("do something nice")

## TypeError

### Description:

Caused by applying operations or functions to non-matching data types.

### Example causing code:

a = 3  
b = "two"

c = a + b

### Solution code:

a = 3  
b = "two"

try:

c = a + b

except TypeError:

print("Do something nice")

## ValueError

### Description:

Caused by passing an incorrect data type into a function.

### Example causing code:

number = "nine"  
int(number)

### Solution code:

number = "nine"

try:

c = a + b

except ValueError:

print("Do something nice")