Exception handling in Python

In [1]:
```
a = 5
b = 2
print(a/b)
print('bye')
```

```
2.5
bye
```

In [2]:
```
c = 5
d = 0

print(d/c)
print('bye')
```

```
0.0
bye
```

In [3]:
```
c = 5
d = 0

print('bye')
print(d/c)
```

```
bye
0.0
```

In [4]:
```
c = 5
d = 0

print('bye')
print(c/d)
```

```
bye
---------------------------------------------------------------------------
ZeroDivisionError                         Traceback (most recent call last)
Cell In[4], line 5
      2 d = 0
      4 print('bye')
----> 5 print(c/d)

ZeroDivisionError: division by zero
```

In [5]:
```
c = 5
d = 0


print(c/d)
print('bye')
```

```
---------------------------------------------------------------------------
ZeroDivisionError                         Traceback (most recent call last)
Cell In[5], line 5
      1 c = 5
      2 d = 0
----> 5 print(c/d)
      6 print('bye')

ZeroDivisionError: division by zero
```

In [6]:
```
c = 3
d = 0

try:
    print(c/d)
print('bye')
```

```
  Cell In[6], line 6
    print('bye')
    ^
SyntaxError: expected 'except' or 'finally' block
```

In [2]:
```
c = 3
d = 0

try:
    print(c/d)

except Exception:
    print('you cannot divide number by zero')

print('bye')
```

```
you cannot divide number by zero
bye
```

In [6]:
```
c = 3                  # to fetch the errors  we use e
d = 0

try:
    print(c/d)

except Exception as e:
    print('you cannot divide number by zero', e)

print('bye')
```

```
you cannot divide number by zero division by zero
bye
```

In [7]:
```
c = 3
d = 0

try:
    print(d/c)

except Exception:
    print('you cannot divide number by zero')

print('bye')
```

```
0.0
bye
```

In [8]:
```python
c = 3
d = 3

try:
    print('resource open') # resource can be anything this can be file this can
    print(c/d)
    print('resource closed')

except Exception as e :
    print('hey you cannot divide Number by zero',':', e)
```

```
resource open
1.0
resoruce closed
```

In [9]:
```python
c = 3
d = 0

try:
    print('resource open')
    print(c/d)
    print('resource closed')

except Exception:
    print('you cannot divide number by zero')
    print('resource closed')
```

```
resource open
you cannot divide number by zero
resource closed
```

In [10]:
```python
c = 3
d = 0

try:
    print('resource open')
    print(c/d)
    print('resource closed')

except Exception as e:
    print('you cannot divide number by zero', ':', e)
```

```
resource open
you cannot divide number by zero : division by zero
```

In [11]:
```python
# if i print the error message as well along with message
c = 3
d = 0

try:
    print('resource open') # resource can be anything this can be file this can
    print(c/d)

except Exception as e :
    print('hey you cannot divide Number by zero',':', e)
    print('resource closed')
# if you see the output then resource is open but resource is not closed hear at
```

```
resource open
hey you cannot divide Number by zero : division by zero
resource closed
```

In [12]:
```python
c = 3
d = 3

try:
    print('resource open') # resource can be anything this can be file this can
    print(c/d)

except Exception as e :
    print('hey you cannot divide Number by zero',  e)
    print('resource closed')
```

```
resource open
1.0
```

In [16]:
```python
# basic example :

n = 10
try:
    res = n/0
except ZeroDivisionError:
    print("Can't be divided by zero!")
```

```
Can't be divided by zero!
```

In [17]:
```python
try:
    n = 0
    res = 100 / n

except ZeroDivisionError:
    print("You can't divide by zero!")

except ValueError:
    print("Enter a valid number!")

else:
    print("Result is", res)

finally:
    print("Execution complete.")
```

```
You can't divide by zero!
Execution complete.
```

In [ ]: