In [1]:

```
#name error
list=12
print(list1)
```

```
---------------------------------------------------------------------------
NameError                                 Traceback (most recent call last)
<ipython-input-1-e32a67e7e257> in <module>
      1 #name error
      2 list=12
----> 3 print(list1)

NameError: name 'list1' is not defined
```

In [2]:

```
#Type error
a='123'
a+=123  # int is added with string
```

```
---------------------------------------------------------------------------
TypeError                                 Traceback (most recent call last)
<ipython-input-2-2e178e6c53c4> in <module>
      1 #Type error
      2 a='123'
----> 3 a+=123  # int is added with string

TypeError: must be str, not int
```

In [3]:

```
l=[1,2,3,4,5,56,6,7]
for i in range(2,l):
    print(i+1)
```

```
---------------------------------------------------------------------------
TypeError                                 Traceback (most recent call last)
<ipython-input-3-3b3fb02e4682> in <module>
      1 l=[1,2,3,4,5,56,6,7]
----> 2 for i in range(2,l):
      3     print(i+1)

TypeError: 'list' object cannot be interpreted as an integer
```

In [4]:

```
#Syntax errror
for i range(1,10):  #for i in range(1,10):   in keyword missing
    print(i)
```

```
  File "<ipython-input-4-b56a74be04fd>", line 2
    for i range(1,10):  #for i in range(1,10):   in keyword missing
              ^
SyntaxError: invalid syntax
```

In [5]:

```
in =123 # keyword is used as variable
```

```
  File "<ipython-input-5-1373c5f361e4>", line 1
    in =123 # keyword is used as variable
     ^
SyntaxError: invalid syntax
```

In [6]:

```
#index error
l=[1,2,3,4,5,56,6,7]
for i in range(len(l)):
    print(l[i+1])
```

```
2
3
4
5
56
6
7

---------------------------------------------------------------------------
IndexError                                Traceback (most recent call last)
<ipython-input-6-d398d1c77bf5> in <module>
      2 l=[1,2,3,4,5,56,6,7]
      3 for i in range(len(l)):
----> 4     print(l[i+1])

IndexError: list index out of range
```

In [7]:

```
#Module not found error
import modulexyz
```

```
---------------------------------------------------------------------------
ModuleNotFoundError                       Traceback (most recent call last)
<ipython-input-7-c98313728f2e> in <module>
      1 #Module not found error
----> 2 import modulexyz

ModuleNotFoundError: No module named 'modulexyz'
```

In [8]:

```
#Key error
dict1=dict()
dict1={1:12,11:12,13:14}
print(dict1[23])
```

```
---------------------------------------------------------------------------
KeyError                                  Traceback (most recent call last)
<ipython-input-8-380b1431ed6d> in <module>
      2 dict1=dict()
      3 dict1={1:12,11:12,13:14}
----> 4 print(dict1[23])

KeyError: 23
```

In [10]:

```
#Import error
from math import x
```

```
---------------------------------------------------------------------------
ImportError                               Traceback (most recent call last)
<ipython-input-10-44b679b53596> in <module>
      1 #Import error
----> 2 from math import x

ImportError: cannot import name 'x'
```

In [11]:

```
#Value error
int("abc")
```

```
---------------------------------------------------------------------------
ValueError                                Traceback (most recent call last)
<ipython-input-11-cfbae703fbb8> in <module>
      1 #Value error
----> 2 int("abc")

ValueError: invalid literal for int() with base 10: 'abc'
```

In [12]:

```
#Zero Division Error
100/0
```

```
---------------------------------------------------------------------------
ZeroDivisionError                         Traceback (most recent call last)
<ipython-input-12-26d369139690> in <module>
      1 #Zero Division Error
----> 2 100/0

ZeroDivisionError: division by zero
```

In [13]:

```
def calculate():
    try:
        print('+')
        print('-')
        print('*')
        print('/')
        print('%')
        print('**')
        operation = input("Select an operator:n")
        print("Enter two numbers")
        number_1 = int(input())
        number_2 = int(input())
        if operation == '+': # To add two numbers
            print(number_1 + number_2)
        elif operation == '-': # To subtract two numbers
            print(number_1 - number_2)
        elif operation == '*': # To multiply two numbers
            print(number_1 * number_2)
        elif operation == '/': # To divide two numbers
            print(number_1 / number_2)
        elif operation == '%': # To remainder two numbers
            print(number_1 % number_2)
        elif operation == '**': # To num1 exponent num2
            print(number_1 ** number_2)
        else:
            print('Invalid Input')
    except Exception as e:
        print(e)
```

In [14]:

```
calculate()
```

```
+
-
*
/
%
**
Select an operator:n*
Enter two numbers
24
rv
invalid literal for int() with base 10: 'rv'
```

In [15]:

```
#print one message if the try block raises a NameError and another for other errors
try:
    a = 123
    if a==123:
        print(b)
        raise NameError("Name error")
    if a >0:
        raise ValueError("Value error")
except NameError as ne:
        print(ne)
except ValueError as ve:
    pritn(ve)
```

```
name 'b' is not defined
```

In [16]:

```
#When try-except scenario is not required?

###Python Exceptions are error scenarios that alter the normal execution flow of the progra

#Try getting an input inside the try catch block

try:
    age=int(input('Enter your age: '))
except:
    print ('You have entered an invalid value.')
```

```
Enter your age: nineteen
You have entered an invalid value.
```