The try block lets you test a block of code for errors.

The except block lets you handle the error.

The else block lets you execute code when there is no error.

The finally block lets you execute code, regardless of the result of the try- and except blocks.

## Exception Handling

When an error occurs, or exception as we call it, Python will normally stop and generate an error message.

These exceptions can be handled using the try statement:

### Example

The try block will generate an exception, because x is not defined:

try:

print(x)

except:

print("An exception occurred")

Output :An exception occurred

Since the try block raises an error, the except block will be executed.

Without the try block, the program will crash and raise an error:

Example

This statement will raise an error, because x is not defined:

print(x)

Output :File "demo\_try\_except\_error.py", line 3, in <module>

print(x)

NameError: name 'x' is not defined

## Else

You can use the else keyword to define a block of code to be executed if no errors were raised:

### Example

In this example, the try block does not generate any error:

try:

print("Hello")

except:

print("Something went wrong")

else:

print("Nothing went wrong")

Output

Hello

Nothing went wrong

## 

## Finally

The finally block, if specified, will be executed regardless if the try block raises an error or not.

### Example

try:

print(x)

except:

print("Something went wrong")

finally:

print("The 'try except' is finished")

Output:

Something went wrong

The 'try except' is finished

## Raise an exception

As a Python developer you can choose to throw an exception if a condition occurs.

To throw (or raise) an exception, use the raise keyword.

### Example

Raise a TypeError if x is not an integer:

x = "hello"

if not type(x) is int:

raise TypeError("Only integers are allowed")

Output:

Traceback (most recent call last):

File "demo\_ref\_keyword\_raise2.py", line 4, in <module>

raise TypeError("Only integers are allowed")

TypeError: Only integers are allowed

**Task 4 : a) write a python Program to create user defined exception**

**Program:**

class Ua(Exception):

pass

try:

age=17

if(age<18):

raise Ua("not eligible")

else:

print("eligible")

except Ua as ab:

print(ab)

**Output :**

**not eligible**

**Task 4 : b)write a python program to demonstrate “finally”keyword in python .**

**Program:**

class Ua(Exception):

pass

try:

age=17

if(age<18):

raise Ua("not eligible")

else:

print("eligible")

except Ua as ab:

print(ab)

finally:

print("hello")

**Output :**

**not eligible**

**Hello**