

Error and Exceptions

day 61

Errors are the problems in a program due to which the problem will stop the execution on the other hand, exceptions are raised when the some internal events occur which changes the normal flow of the program.

- * Syntax error
- * logical error

Syntax error :

When the proper syntax of the language is not followed then syntax error is thrown

Example :

amount = 19999

if (amount > 2999)

print("you are eligible to purchase")

Output:

if (amount > 1999)
 ^

Syntax Error : invalid Syntax

it returns a syntax error message because after if statement a colon (:) is missing. we can fix this by writing correct syntax.

logical errors

when in the runtime an error occurs after passing the syntax test is called exception or logical types. for example when we divide any number by zero the zerodivision error exception is raised or when we import a module that does not exist then import error is raised.

Exception

Description

Index error - when the wrong index of a list is retrieved

Assertion error - it occurs when assert statement fails

Attribute error - attribute assessment is failed

Import error - imported module is not found

Key error - key of the dictionary is not found

Name error - It occurs when the variable is undefined

Memory error - It occurs when a program ran out of memory

Type Error - it occurs a function and operation is applied in an incorrect type.

Error handling

Handling exceptions with Try/except / finally :

we write unsafe code in the try
fall back code in except and final code in
finally block.

Example

try :

```
print ("code starts")
```

```
print (I/O)
```

except :

```
print ("an error occurs")
```

finally :

```
print ("finally statement")
```