Q1. What are the two latest user-defined exception constraints in Python 3.X?

Answer:

🡪 raise keyword

🡪 assert keyword

Q2. How are class-based exceptions that have been raised matched to handlers?

Answer:

In Python, programmer can define custom exceptions by creating a new class which will be consisting of built-in Python exception class. This type of class-based exception are very useful for developing a large Python program and can be helpful in monitoring errors that will be stored into a separate file for error management in the program (not necessarily). As we know exceptions are raised using the raise keyword and handled using try...except blocks whereas class-based exceptions can be raised in any procedures and can be further propagated by any procedures.

Q3. Describe two methods for attaching context information to exception artefacts.

Answer:

🡪 The process() method of logging.LoggerAdapter can be used to add contextual information as an attributes to the log message.

🡪 The logging.exception() method can be used to log messages with the level ERROR on the logger. As an example, following information can be stored, such as type of error, line number, file name, file path, etc.

Q4. Describe two methods for specifying the text of an exception object's error message.

Answer:

🡪 print() function can be used to print the error message of an exception by using the object of an exception class.

🡪 logging.error() method can be used to print the error message of an exception by using the object of an exception class.

Example 1:

|  |
| --- |
| try:  a = '10'  b = 20  \_sum = a + b  except TypeError as e:  print(e) |

Example 2:

|  |
| --- |
| try:  f = open('test.txt', 'r')  except Exception as e:  logging.error(e) |

Q5. Why do you no longer use string-based exceptions?

Answer:

In Python versions 1.5 and later, the standard exceptions are Python classes, they are not string-based exception. All standard exceptions (string-based) have been converted to class objects, and users are encouraged to do the same. It is more efficiently handled using classes since classes have many useful features.