Module 4 assignment

1. What is File function in python? What is keywords to create and write

* Python file object provides methods and attributes to access and manipulate files. Using file objects, we can read or write any files. Whenever we open a file to perform any operations on it, Python returns a file object. To create a file object in Python use the built-in functions, such as open() and os. popen()

1. Explain Exception handling? What is an Error in Python?

* Exception handling is a mechanism that separates code that detects and handles exceptional circumstances from the rest of your program. Note that an exceptional circumstance is not necessarily an error
* Errors are problems that occur in the program due to an illegal operation performed by the user or by the fault of a programmer, which halts the normal flow of the program.

3) How many except statements can a try-except block have? Name Some built-in exception classes:

-> A try statement can have more than one except clause

-> Exception Description :

= IndentationError

= IndexError

= KeyError

= KeyboardInterrupt

1. When will the else part of try-except-else be executed?-

* The else part is executed when no exception occurs.

5) Can one block of except statements handle multiple exception?

-> Yes, a single block of except statements in Python can handle multiple exceptions. This feature allows you to handle different types of exceptions using a single block of code.

6) When is the finally block executed?

-> after leaving the try statement. In case if some exception was not handled by except block, it is re-raised after execution of finally block. finally block is used to deallocate the system resources.

7) What happens when „1‟== 1 is executed?

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8) How Do You Handle Exceptions With Try/Except/Finally In Python? Explain with coding snippets.

-> Exception handling with try, except, else, and finally

First try clause is executed i.e. the code between try and except clause. If there is no exception, then only try clause will run, except clause will not get executed. If any exception occurs, the try clause will be skipped and except clause will run

9) What are oops concepts? Is multiple inheritance supported in java

10) How to Define a Class in Python? What Is Self? Give An Example Of A Python Class

-> class is a code template for creating objects. Objects have member variables and have behaviour associated with them. In python a class is created by the keyword class

-> SELF represents the instance of class. This handy keyword allows you to access variables, attributes, and methods of a defined class in Python.

-> class example :

class MyClass:

x = 5

11) Explain Inheritance in Python with an example? What is init? Or What Is A Constructor In Python?

-> Inheritance allows us to define a class that inherits all the methods and properties from another class. Parent class is the class being inherited from, also called base class. Child class is the class that inherits from another class, also called derived class

EXAMPLE:

# A Python program to demonstrate inheritance

class Person(object):

# Constructor

def \_\_init\_\_(self, name, id):

self.name = name

self.id = id

# To check if this person is an employee

def Display(self):

print(self.name, self.id)

# Driver code

emp = Person("parth", 102) # An Object of Person

emp.Display()

12) What is Instantiation in terms of OOP terminology?

-> Instantiate (a verb) and instantiation (the noun) in computer science refer to the creation of an object (or an “instance” of a given class) in an object-oriented programming (OOP) language. Referencing a class declaration, an instantiated object is named and created, in memory or on disk

13) What is used to check whether an object o is an instance of class A?

-> Using isinstance() function, we can test whether an object/variable is an instance of the specified type or class such as int or list. In the case of inheritance, we can checks if the specified class is the parent class of an object. For example, isinstance(x, int) to check if x is an instance of a class int .

14) What relationship is appropriate for Course and Faculty?

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15) What relationship is appropriate for Student and Person?