|  |  |
| --- | --- |
| **FILE NAME** | **CONTENT** |
| **DAY-1** | * **Programming methodologies** * **Drawback of procedure orientation** |
| **DAY-2** | * **Object orientation** * **Object oriented fetures** * **What is encapsulation** * **Introduction to class** * **What is a structure?** |
| **DAY-3** | * **Class** * **Object** |
| **DAY-4** | * **Object have 3 thigs: state, behaviour, identity** * **How to create a class in python?** * **Types of variables** * **Instance variable Vs static variable** * **What is a method** * **How to create an instance variable** |
| **DAY- 5** | * **Where can we create an instance variable** * **Types of methods** * **First object oriented program** |
| **DAY-6** | * **How to overcome the drawback of first object oriented program** * **Validating the data** |
| **DAY-7** | * **Self parameter explanation** * **Keyword arguments** * **\_\_dict\_\_** * **How to create instance variable outside the class** |
| **DAY-8** | * **Creating multiple objects** * **Private variables** |
| **DAY-9** | * **Is it possible to create an instance method with the class name?** * **If i create a normal function & class definition with the same name what happens?** * **what is \_\_str\_\_() method & when it will be called?** * **What are magic methods?** * **Constructor-Introduction** |
| **DAY-10** | * **Constructors – introduction** * **Types of constructors** * **How to call constructors explicitly** * **Constructor overloading** |
| **DAY-11** | * **Static variable** * **Various places to declare static variable** * **classmethod** |
| **DAY-12** | * **Mini banking application** |
| **DAY-13** | * **How to access members of one class inside another class** * **Has-A relationship** * **Nested class/inner class** |
| **DAY-14** | * **Garbage collection** * **Destructor in python** |
| **DAY-15** | * **Introduction to inheritance** * **Types of inheritance** |
| **Day-16** | * **Built in class “object”** * **Constructors in inheritance** * **How to call parent class constructor from child class** * **DLR algorithm for method resolution** |
| **DAY-17** | * **C3 algorithm** * **Practice examples on mro using c3 algorithm** |
| **DAY-18** | * **Use of Super() function** * **Polymorphism in python** * **Introduction to operator overloading** |
| **DAY-19** | * **Example programs on operator overloading** * **Duck typing** |
| **DAY-20** | * **Abstract methods** * **Abstract class** |
| **DAY-21** | * **Introduction to exception handling** |
| **DAY-22** | * **Try keyword** * **Except keyword** * **Example programs** |
| **DAY-23** | * **Try with multiple except blocks** * **Default except block** * **Single except block with multiple exceptions** * **Finally block** |
| **DAY-24** | * **Finally keyword** * **Try with else block** * **Userdefined exception** |
| **DAY-25** | * **Introduction to multithreading** |
| **DAY-26** | * **How to pass an argument to a function , if executing the function is a the job of a thread** * **Join() method** |
| **DAY-27** | * **Our class inheriting Thread class** * **Join(secs)** * **active\_count()** * **enumerate()** |
| **DAY-28** | * **side effects of multithreading** * **thread synchronization** * **lock vs Rlock** * **semaphore** |
| **DAY-29** | * **iterator vs iterable** |
| **DAY-30** | * **how for loop is implemented** |
| **DAY-31** | * **how to create iterator to custom(means userdefined) class** |
| **DAY-32** | * **introduction to regular expression in python** * **compile()** * **finditer()** * **search()** * **findall()** * **metacharacters: | []** |
| **DAY-33** | * **match()** * **^ caret symbol: whats the use** * **Number of examples on match() method** * **Built in character sets** |
| **DAY-34** | * **Fullmatch()** * **Search()** * **Metcharacters: ^,$,()** * **Quantifier: ?,{}** |
| **DAY-35** | * **Validating car registration number** * **webscraping** |
| **DAY-36** | * **Generators in python** |
| **DAY-37** | * **FILE PROGRAMMING** * **Open(),close()** * **Isfile(),mode,closed,name** * **Writable(),readable()** * **Various modes** * **How to copy the data to a file** |
| **DAY-38** | * **Writelines()** * **Read(),read(n),readline(),readline(n),readlines()** * **With keyword** |
| **DAY-39** | * **Seek(),tell()** * **How to transfer image from one file to another file: binary file** * **How to handle csv file?** * **Pickling & unpickling** |