Internship Program – AkashTechnolabs

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Day-5-Report

(Work Summary)

INTERNSHIP at AkashTechnoLabs

Day-5: What we learnt?

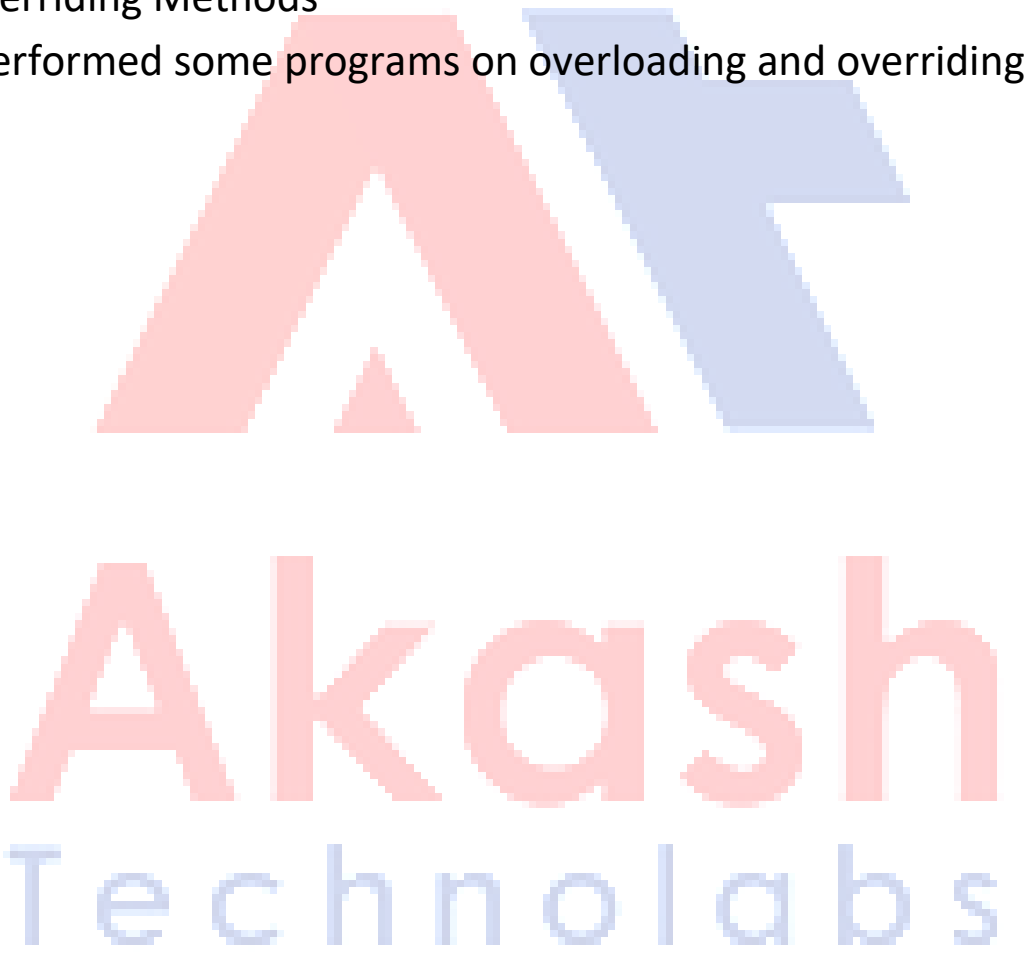
- ✓ In OOP's concept, first we learned 'What is class?', 'Why it is so important for any OOP language?'
- ✓ Then, we learned 'How to define in class in python'. It is defined like this:
  - ➢ class classname:
- ✓ Classes commonly contains data field to store the data and methods for defining behaviours.
- ✓ Then we learned how to access class field like variables, and it defined methods to perform any according tasks. This requirement is fulfilled by Object of that class which is also known as instance of class which provide access for any element or method of that related class.
- ✓ Object of class is defined like this:
  - ➢ objectname = classname()
- ✓ Then, we learned 'how to define methods in class?'
- ✓ We performed programs on class and objects.

- ✓ Then, we differentiated method and functions and deeply understand the difference of both.
- ✓ Then we get to know about 'self' argument which are mostly used in method of class call initializer this method is also known as '__init__' method its work is to initialize the variable of class
- ✓ Then, we learned 'what is constructor?'. A constructor is a class function that instantiates an object to predefined values. It begins with a double underscore (_). It __init__() method.
- ✓ There are two types of constructors:
  - ➢ Default Constructor
  - ➢ Parameterized Constructor
- ✓ Then we learned 'how to use and when to use' default and parameterized constructors with some programs.
- ✓ Then, we learned most important concept in OOP- Inheritance. Inheritance allows programmer to create a general class first then later extend it to more specialized class (parent-child class concept).
- ✓ Using inheritance you can inherit all access data fields and methods, plus you can add your own methods and fields, thus inheritance provide a way to organize code, rather than rewriting it from scratch.
- ✓ class SubClass(SuperClass):

  # data fields

  # instance methods
- ✓ Then, we learned types of inheritance:
  - ➢ Single-Level inheritance
  - ➢ Multi-Level inheritance
  - ➢ Multiple inheritance
  - ➢ Hierarchical Inheritance
  - ➢ Hybrid Inheritance

- ✓ The we learned these types of inheritance deeply with example of each type which help use to make understand very well and conceptual way.
- ✓ We learned important topic 'Polymorphism'. Polymorphism is an ability (in OOP) to use common interface for multiple form (data types).
- ✓ Types of Polymorphism:-
  - ➢ Overloading Methods
  - ➢ Overriding Methods
- ✓ We performed some programs on overloading and overriding methods.



Internship Program – AkashTechnolabs

Task: -

GitHub Link:- https://github.com/kamiyab786/Internship-AkashTechnolabs/tree/main/Day%205

1. Pract_01.py

```
Sum of 10, 20 and 30 = 60

Process finished with exit code 0
```

2. Pract_02.py

```
Area of circle with radius(3) = 28.274333882308138

Process finished with exit code 0
```

3. Pract_03.py

```
enter p:10000
enter r:2.4
enter n:3
Simple interest of p(10000), r(2.4) and n(3) = 720.0
```

4. Pract_04.py

```
Enter any number:10
Square of 10 = 100
```

5. Pract_05.py

```
-------Employee class display()-------
Name :  KAMIYAB
Designation :  HR Manager
-------Subclass display()---------
Name :  KAMIYAB
Designation :  HR Manager
Salary :  10000
```

6. Pract_06.py

```
Enter length: 10
Enter width: 20
Area of rectangle with length(10) and width(20) = 200
```

7. Pract_07.py

```
Enter length:10
Area of square with length(10) = 100
```

8. Pract_08.py

```
----Publisher display()----
Name:  Kamiya Bhatt
----Book display()----
Name:  Kamiya Bhatt
Pages:  200
----Tape display()----
Name:  Kamiya Bhatt
Pages:  200
Time: 3 hrs
```

9. Pract_09.py

```
Scheme id     :  1
Scheme name   :  KAMIYAB
Outgoing rate :  20.4
Message Charge:  10000
Customer id:  10
Customer name:  BHATT
Customer mobile:  1234569878
```

10. Pract_10.py

```
Enter a: 10
Enter b: 20
Summation of 10 and 20 = 30
Subtraction of 10 and 20 = -10
Multiplication of 10 and 20 = 200
```