ASSIGNMENT-4

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CSA0914 - Java Programming

① Java program for Simple Inheritance.

Input :- Create an object.

Output :- The dog Barks.

```
Class Animal {
        String name;
Public Animal (String name) {
        this.name = name;
}
Public void makeSound() {
        System.out.println("Animal makes sound");
} }
Class Dog extends Animal {
        Public dog (String name) {
            Super(name);
}
Public class Simple inheritance {
        Public Static void main (String[] args) {
        Dog dog = new Dog ("Barks");
} } d.makeSound();
```

② Java Program for Constructor inheritance

Input :- Create student object with name age and grade

output :- Display the name, age and grade of student.

```
Class person {
        String name;
        int age;
```

```
Public person(String name, int age){
    this.name = name;
    this.age = age;
}
class student extends person{
    String grade;
    Public student( string name, int age){
        super (name, age)
        this.grade = grade;
    }}
Public Class constructor inheritance{
    public static void main(String[] args){
        Student s = new Student[10];
        S.display();
}}
```

(3) Multilevel Inheritance for Java program.

Input: Car class and speed, fueltype, batteryCapacity properties.

output: Display all properties of electric car.

```
Class vehicle{
    int speed;
    String fueltype;
    Public vehicle( int speed, String fueltypes){
        this.speed = speed;
        this.fueltype = fueltype;
}}
Class car extends vehicle{
    super (speed, fueltypes);
}
    Public Class multilevel inheritance{
    Public Static void main(String[] args){
```

```
    ElectricCar e=new ElectricCar(electric, 100);
    e.displayC);
  }
}
```

④ Java Program for Method overriding & Inheritance.

Input: Create objects of circle, rectangle and draw

output: Drawing Circle and Rectangle.

```
Class Shape{
    Public void drawC){
    System.out.println("Drawing a Shape");
}}
Class Circle extends Shape{
    Public void drawC){
    System.out.println("Drawing a Circle");
}}
Public Class Method overiding {
    Public Static void main(String[] args){
    Shape c= new circleC);
    Shape r = new rectangleC);
    c.drawC);
    r.drawC);
}}
```

⑤ Java program for Inheritance and Access modifiers.

Input: Create manager object and acess private, protected, Public.

output: Private access.

```
Class Employee{
    Private String name;
   protected int id;
    Public String department;

Public Employee(String name, int id, String dept){
        this.name = name;
        this.id = id;
        this.dept= department;
}
}
Class manager extends manager{
    Public manager (String name, String dept){
}
}

Public Class AccessModifiers{
    Public Static void main(String[] args){
    Manager M = new manager(sales);
     M.display();
}
}
```