*LAB # 08*

Method Overriding & polymorphism

# *OBJECTIVE:*

*To Study Method Overriding and polymorphism*

**Task # 01:**

*Create a class Card, and its children classes are Valentine, Holiday, and Birthday. A card class will have a greeting () method that writes out a greeting. Each type of card contains an appropriate greeting. The Holiday card says "Season's Greetings." The Birthday card says "Happy Birthday." The Eid card says "Happy blissful Eid". Create objects of the three child classes: Holiday, Birthday and Eid and show the polymorphic behavior (call the greeting methods from each object)*

**Code:**

**Output**

**Task # 02:**

*Create a super class called Car. The Car class has the following fields and methods. int speed; double regularPrice; String color; double getSalePrice(); Create a sub class of Car class and name it as Truck. The Truck class has the following fields and methods.int weight; doublegetSalePrice();//Ifweight>2000,10%discount.Otherwise,20%disc ount. Create a subclass of Car class and name it as Ford. The Ford class has the following fields and methods. int year; int manufacturerDiscount; double getSalePrice();//From the sale price computed from Car class, subtract the manufacturer Discount. Create MyOwnAutoShop class which contains the main() method. Perform the following within the main() method. Create two instances of the Ford and Truck class and initialize all the fields with appropriate values. Use super(...) method in the constructor for initializing the fields of the super class. Create an instance of Car class and initialize all the fields with appropriate values. Display the sale prices of all instance. Show polymorphic behavior*

**Code:**

**Output**