CargoPlane

```
package StaticMethod;
                     class Plane {
                    void takeoff()
      System.out.println("Plane is taking off");
                      void fly()
        System.out.println("Plane is flying");
                      void land()
       System.out.println("Plane is landing");
            class CargoPlane extends Plane
            void fly()// overriden methods
 System.out.println("Plane is flying at low height");
       void carryCargo() // specialized method
   System.out.println("Cargo plane carries cargo");
          class PassengerPlane extends Plane
            void fly()//overrriden methods
System.out.println("Plane is flying at medium height");
      void carrypassenger()//specialized methood
      System.out.println("Carries passenger ");
           class FighterPlane extends Plane
                       void fly()
                           {
```

```
System.out.println("Plane is flying at heigher height");
              public class ExampleFprTypes {
          public static void main(String[] args)
             CargoPlane cp = new CargoPlane();
         PassengerPlane pp = new PassengerPlane();
           FighterPlane fp = new FighterPlane();
   //we have three different type references exibhition
             Plane ref;//parent type reference
ref=cp; //Assigning child type reference to the parent type
       ref.takeoff();// one reference one behaviour
                        ref.fly();
                        ref.land();
      ((CargoPlane)(ref)).carryCargo();//Down casting
                          ref=pp;
                      ref.takeoff();
                        ref.fly();
                        ref.land();
                  //pp.carrypassenger();
                          ref=fp;
                       ref.takeoff();
                        ref.fly();
                        ref.land();
```

Output

Plane is taking off
Plane is flying at low height
Plane is landing
Cargo plane carries cargo
Plane is taking off
Plane is flying at medium height
Plane is landing
Plane is taking off
Plane is flying at heigher height
Plane is landing