INPUT:-

```
  enum CarType {

        SMALL, SEDAN, LUXURY

}



  abstract class Car {


    public Car(CarType model) {

        this.model = model;

        arrangeParts();

    }


    private void arrangeParts() {


    }


    // Do subclass level processing in this method

    protected abstract void construct();


    private CarType model = null;


    public CarType getModel() {

        return model;
    }

    public void setModel(CarType model) {
        this.model = model;
    }
}


  class LuxuryCar extends Car {

    LuxuryCar() {
        super(CarType.LUXURY);
        construct();
    }

    @Override
    protected void construct() {
        System.out.println("Building luxury car&quot");
        // add accessories
    }
}


  class SmallCar extends Car {
    SmallCar() {
        super(CarType.SMALL);
        construct();
    }

    @Override
    protected void construct() {
        System.out.println("Building small car");
        // add accessories
    }
}


  class SedanCar extends Car {

    SedanCar() {
        super(CarType.SEDAN);
        construct();
    }

    @Override
    protected void construct() {
        System.out.println("Building sedan car");
        // add accessories
    }
}

  class CarFactory {
    public static Car buildCar(CarType model) {
        Car car = null;
        switch (model) {
        case SMALL:
            car = new SmallCar();
            break;

        case SEDAN:
            car = new SedanCar();
            break;

        case LUXURY:
            car = new LuxuryCar();
            break;

        default:
            // throw some exception
            break;
        }
        return car;
    }
}


public class TestFactoryPattern {
    public static void main(String[] args) {
        System.out.println(CarFactory.buildCar(CarType.SMALL));
        System.out.println(CarFactory.buildCar(CarType.SEDAN));
        System.out.println(CarFactory.buildCar(CarType.LUXURY));
    }
}

/*
```

OUTPUT:

```
Building small car
javaapplication5.SmallCar@16b98e56
Building sedan car
javaapplication5.SedanCar@27d6c5e0
Building luxury car&quot
javaapplication5.LuxuryCar@15aeb7ab
*/
```