

The exercise is to study and extend the car example further ...

So first play a little with the example ... maybe change movements or the way the cars are drawn...

Then extend the example.

If you extend the example you are to **create at least one new class** and **one new subclass of car**.

Of course you also should make some instances of these classes and let them do something.

For instance ... A contestant (of a race) may be an object which has a name, a number and a car.

Contestants can be racing against each other .. and perhaps you can create an object of type referee that announces the name of the winner of the race.

(Below the text of the Car example that you could use as a beginning ... but word destroyed the formatting ...)

```
Car mycar, yourcar, hiscar;
```

```
void setup()
```

```
{
```

```
    size(500,500);
```

```
    mycar = new Car();
```

```
    yourcar = new LuxCar();
```

```
    hiscar = new Car(color(0,200,0));
```

```
    mycar.carpaint( color(0,0,250) );
```

```
};
```

```
void draw()
```

```
{ background(123,234,213);
```

```
    mycar.DrawCar();
```

```
    mycar.drive(2);
```

```
    hiscar.DrawCar();
```

```
yourcar.DrawCar();  
yourcar.setypos(324);  
yourcar.drive(3);  
};
```

```
class Car{  
  
    color c;  
    int xpos, ypos;  
    int tirewidth = 33;  
    int carlength = 120;  
  
    Car(){  
        c = color(200,0,0);  
        xpos = 123;  
        ypos = 134;  
    }  
    Car(color p ){  
        c = p ;  
        xpos = 123;  
        ypos = 134;  
    }  
    void setypos( int y)  
    { ypos = y ;  
  
    }  
}
```

```

void carpaint(color desiredColor )
{
    c = desiredColor;

}

void DrawCar(){
    fill(c) ;

    ellipse(xpos,ypos,carlength,20);

    fill(0);

    rect(xpos,ypos+10+tirewidth ,10, -tirewidth);

    rect(xpos,ypos-10-tirewidth ,10, +tirewidth);

}

void drive(int s)
{
    xpos += s;

    xpos = xpos % width;

    ypos = ypos % height;

}

}

class LuxCar extends Car
{
    LuxCar()

    { // super( color(0,200,0)); //keyword super refers to superclass

        tirewidth = 64;

        carlength = 150;

    }
}

```

}