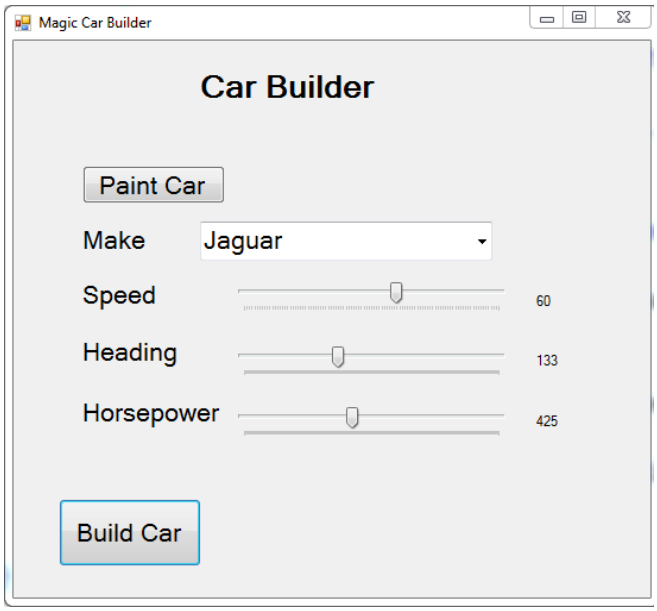
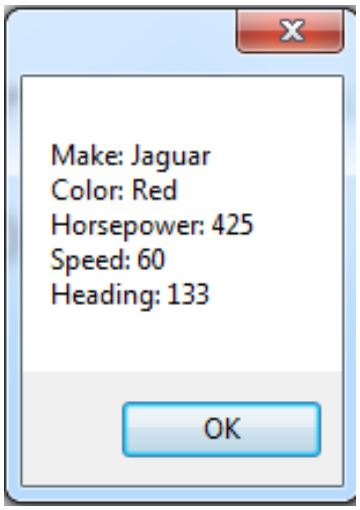
Name: **Session :**
Programming II
Lab Exercise 5/18/2021

In this lab you will create an Automobile class. When you have completed this lab, you are to submit the source code and a screen shot of your running application.

Creating and Automobile Class
In this exercise, you will create an Automobile class. You will use this class later in an Automobile Construction Factory. On your form you will have the ability to choose color, make, initial speed, and direction of travel (use compass angles).

1. Create an empty Windows Forms application





2. Add a class (Automobile) to you project. You will use this to put your class definition that is public.
3. In your class definition, define four private properties:

```
private Color myColor;
private string myMake;
private int mySpeed;
private int myHeading;
private int myHP;
```

4. In your class definition, write a constructor sub to initialize the private properties:

```
public Automobile()
{
   myColor = Color.Black;
   myMake = "";
   mySpeed = 0;
   myHeading = 0;
   myHP = 0;
}

public Automobile(Color color, string make, int s, int h, int hp)
{
   myColor = color;
   myMake = make;
   mySpeed = s;
   myHeading = h;
   myHP = hp;
}
```

5. Now write public get methods for each private member (getColor, getMake, getSpeed, getHeading, getHP).
6. Now write public set methods for each private member (setColor, setMake, setSpeed, setHeading, setHP).
7. Now add the appropriate controls to your form that allow you to select the color, make, speed, heading and HP.
8. Add a button that creates your automobile.
9. Add a button that will "paint" your car. I used a ColorDialog control to select color.
10. Display the properties of the automobile in labels.
11. When your Automobile is constructed, display its properties in a MessageBox.