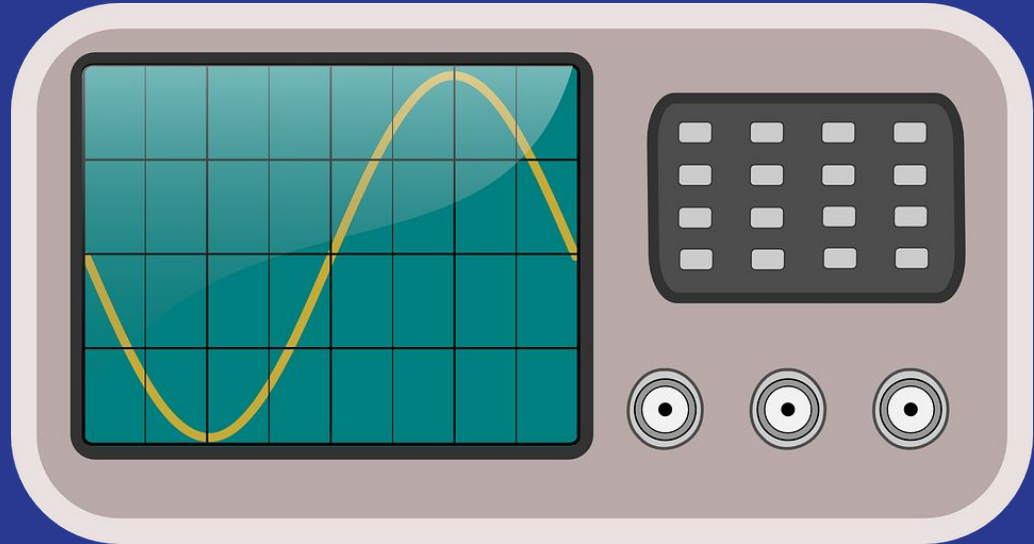
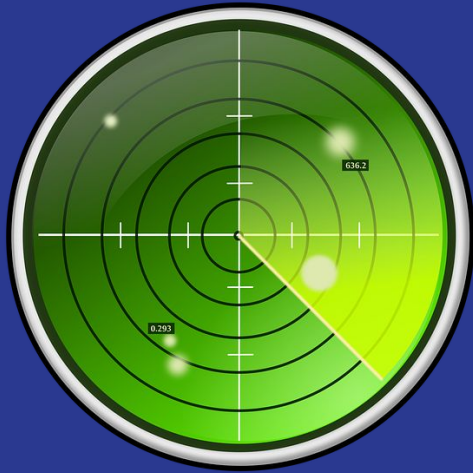


# Scope

Module 1



# Variable Scope

- Lifespan of the variable
- Variables in memory cannot live beyond the current running program
- Sometimes variables of the same name live within the same program
- How can they co-exist without confusion or collision?



# Variable Lifespan

- Life begins with its definition
- Life ends with the closing brace ( } ) that is paired with the open brace of the definition
- What about collisions?
  - Nearest definition wins



# Example 1

```
private void startButton_Click(object sender, EventArgs e)
{
    int newScore = Convert.ToInt32(textBoxScore.Text);
    messageBlock.Text = "New score: " + newScore;
    int totalScore = 10 * newScore;
    messageBlock.Text = "Current score: " + totalScore";
}
```



## Example 2

```
public partial class MainWindow : Window
{
    string playerName;
    int myNumber;

    public MainWindow()
    {
        InitializeComponent();
    }
}
```

