Adnans window application calculator cheat sheet

<https://youtu.be/17K86lnbKCw>

Creating a Windows calculator application in Microsoft Visual Studio involves using Windows Forms or WPF (Windows Presentation Foundation) to design the user interface and implementing the logic for performing calculations. Here, I'll provide a simple example using Windows Forms:

SETTING UP THE TOOLBOX: go to View in the top bar and go to toolbox to drag a drop buttons

### Steps to Create a Windows Calculator Application:

#### 1. Open Visual Studio:

- Launch Microsoft Visual Studio.

#### 2. Create a New Project:

- Go to "File" > "New" > "Project..."

- Choose "Windows Forms App (.NET Framework)" or "Windows Forms App (.NET Core)" depending on your preference and click "Next".

- Name your project (e.g., "CalculatorApp") and click "Create".

#### 3. Design the User Interface:

- Double-click on `Form1.cs` (or `MainWindow.xaml` if using WPF) to open the designer.

- Drag and drop buttons and textboxes to design the calculator interface.

#### 4. Add Event Handlers:

- Double-click on each button to create event handlers for the button clicks.

- Implement the logic to handle button clicks and update the display accordingly.

#### 5. Implement Calculator Logic:

- Write code to perform arithmetic operations based on user input.

- You may want to create methods to handle addition, subtraction, multiplication, division, etc.

#### Example (Windows Forms):

```csharp

using System;

using System.Windows.Forms;

namespace CalculatorApp

{

public partial class Form1 : Form

{

public Form1()

{

InitializeComponent();

}

private void Button\_Click(object sender, EventArgs e)

{

Button button = (Button)sender;

textBox1.Text += button.Text;

}

private void btnEquals\_Click(object sender, EventArgs e)

{

try

{

string expression = textBox1.Text;

var result = new System.Data.DataTable().Compute(expression, "");

textBox1.Text = result.ToString();

}

catch (Exception ex)

{

MessageBox.Show("Error: " + ex.Message);

}

}

private void btnClear\_Click(object sender, EventArgs e)

{

textBox1.Clear();

}

}

}

```

### Example Interface:

Here's a simple example of a Windows Forms calculator interface:

```

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| |

| 7 8 9 |

| 4 5 6 |

| 1 2 3 |

| 0 . = |

| + - \* / |

| Clear |

------------------------------

```

### Run the Application:

- Press `F5` or click the "Start" button to build and run the application.

- Test your calculator application to ensure that it works as expected.

### Additional Features:

- You can add more functionality like memory operations (M+, M-, MR, MC), scientific functions, etc., depending on your requirements.

- Consider using WPF for more modern and flexible UI design if desired.

That's it! You've created a simple Windows calculator application in Microsoft Visual Studio. Feel free to expand and customize it further based on your needs.