Best Programming Practices

Commenting

Before chunks of code, leave a comment stating what the purpose of the chunk is and what the expected output, if any, will be.
For example:

```
//creates variables for answer and input
int answer = 15;
int input = Convert.ToInt32(txtInput.Text);

//checks if user input is correct, outputs response if yes
if (input == answer)
{
    MessageBox.Show("You win!");
}
```

//creates variables for answer and input
int answer = 15;
int input = Convert.ToInt32(txtInput.Text);

//checks if user input is correct, outputs response if yes
if (input == answer) {
MessageBox.Show(“You win!”);
}

Naming

Variable names need to be clear and easily understood. Don't be afraid to have long, but specific names - C# remembers your variables so you won't have to type them out every time.

```
int x;
int y;
int a;

x = Convert.ToInt32(t.Text);
y = Convert.ToInt32(t2.Text);

if (x < y)
{
    a = y - x;
}
```

int x;
int y;
int a;

x = Convert.ToInt32(t.Text);
y = Convert.ToInt32(t2.Text);

if (x < y)
{
*   a = y - x;*
}

```
int birthYear;
int currentYear;
int age;

birthYear = Convert.ToInt32(txtBirthYear.Text);
currentYear = Convert.ToInt32(txtCurrentYear.Text);

if (birthYear < currentYear)
{
    age = currentYear - birthYear);
}
```

```
//creates variables
int birthYear;
int currentYear;
int age;

//gets user input
birthYear = Convert.ToInt32(txtBirthYear.Text);
currentYear = Convert.ToInt32(txtCurrentYear.Text);

//checks user input, finds users age
if (birthYear < currentYear)
{
    age = currentYear - birthYear);
}
```

//creates variables
int birthYear;
int currentYear;
int age;

//gets user input
birthYear = Convert.ToInt32(txtBirthYear.Text);
currentYear = Convert.ToInt32(txtCurrentYear.Text);

//checks user input, finds users age

```
if (birthYear < currentYear)
{
      age = currentYear - birthYear);
}
```

Pseudo-code

Pseudo-code is a blueprint for your program. It is intended for you, a human, to read, NOT for a computer to read.
For example:

create variables birthYear, currentYear, age

get user input for birthYear, currentYear

IF birthYear is smaller than currentYear
        age equals currentYear minus birthYear
END IF

This is a basic level description of the above code. This type of pseudo-code is universal and clear, so you could transfer it into almost any programming language.