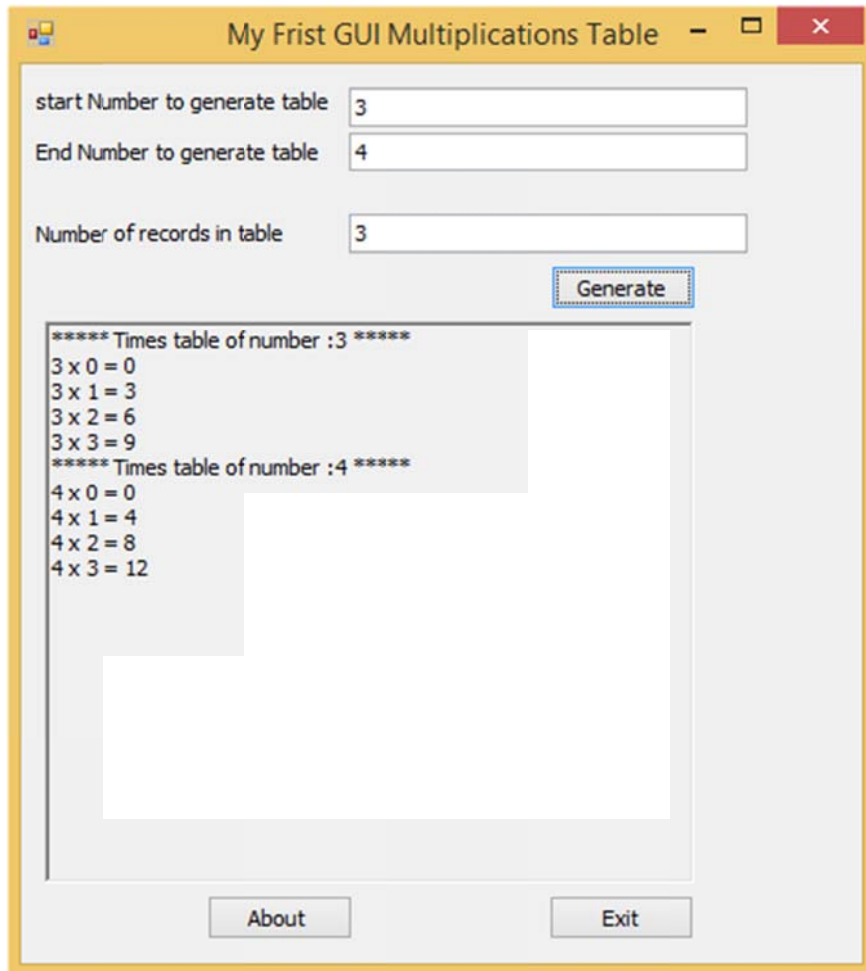


# Programming I – Tutorial 03

## Loops

## Application 3.1: times table generator



## Solution

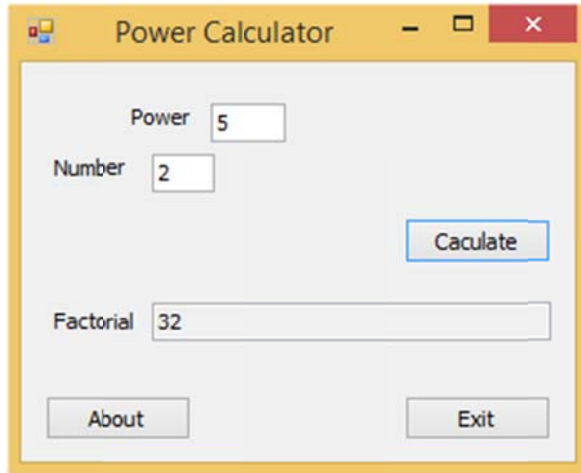
```

private: System::Void button2_Click(System::Object^ sender, System::EventArgs^ e) {
    Application::Exit();
}
private: System::Void button3_Click(System::Object^ sender, System::EventArgs^ e) {
    MessageBox::Show("my first multiplications table generator, by : me.");
}
private: System::Void richTextBox1_TextChanged(System::Object^ sender, System::EventArgs^ e) {
}

```

```
private: System::Void button1_Click(System::Object^ sender, System::EventArgs^ e) {
    richTextBox1->Text="";
    int num1,num2,records;
    num1=int::Parse(textBox1->Text);
    num2=int::Parse(textBox2->Text);
    records=int::Parse(textBox3->Text);
    for(int m=num1;m<=num2;m++)
    {
        richTextBox1->Text=richTextBox1->Text+"***** Times table of number :"+m.ToString()+" *****" + "\r\n";
        for(int n=0;n<=records;n++)
        {
            int result=n*m;
            richTextBox1->Text=richTextBox1->Text+m.ToString()+ " x " + n.ToString() + " = " +
                result.ToString() + "\r\n";
        }
    }
}
```

## Application 3.2: power calculator



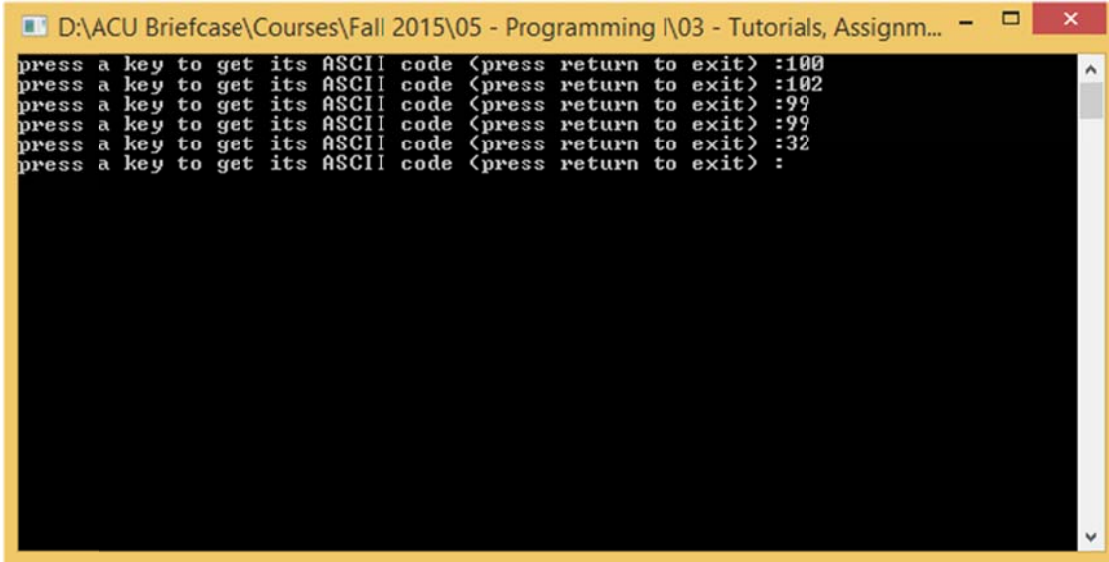
## Solution

```

private: System::Void button1_Click(System::Object^ sender, System::EventArgs^ e) {
    int n,num,power;
    float result;
    num=int::Parse(textBox1->Text);
    power=int::Parse(textBox2->Text);
    result=1;
    for(n=1;n<=power;n++)
        result*=num;
    textBox3->Text=result.ToString();
}
private: System::Void button2_Click(System::Object^ sender, System::EventArgs^ e) {
    Application::Exit();
}
private: System::Void button3_Click(System::Object^ sender, System::EventArgs^ e) {
    MessageBox::Show("my first power calculator, by : me.");
}

```

Program 3.3: build a program that translates the pressed key to its ASCII codes. Program exit when press <return>



```
D:\ACU Briefcase\Courses\Fall 2015\05 - Programming \03 - Tutorials, Assignm...
press a key to get its ASCII code (press return to exit) :100
press a key to get its ASCII code (press return to exit) :102
press a key to get its ASCII code (press return to exit) :99
press a key to get its ASCII code (press return to exit) :99
press a key to get its ASCII code (press return to exit) :32
press a key to get its ASCII code (press return to exit) :
```

## Solution

```
#include "stdafx.h"
#include "stdio.h"
#include "conio.h"
int _tmain(int argc, _TCHAR* argv[])
{
    char ch=0;
    while(!(ch==13))
    {
        printf("press a key to get its ASCII code (press return to exit) :");
        ch=getch();
        printf("%d\n",ch);
    }
    return 0;
}
```