

Nama: Marvel Sanjaya Setiawan

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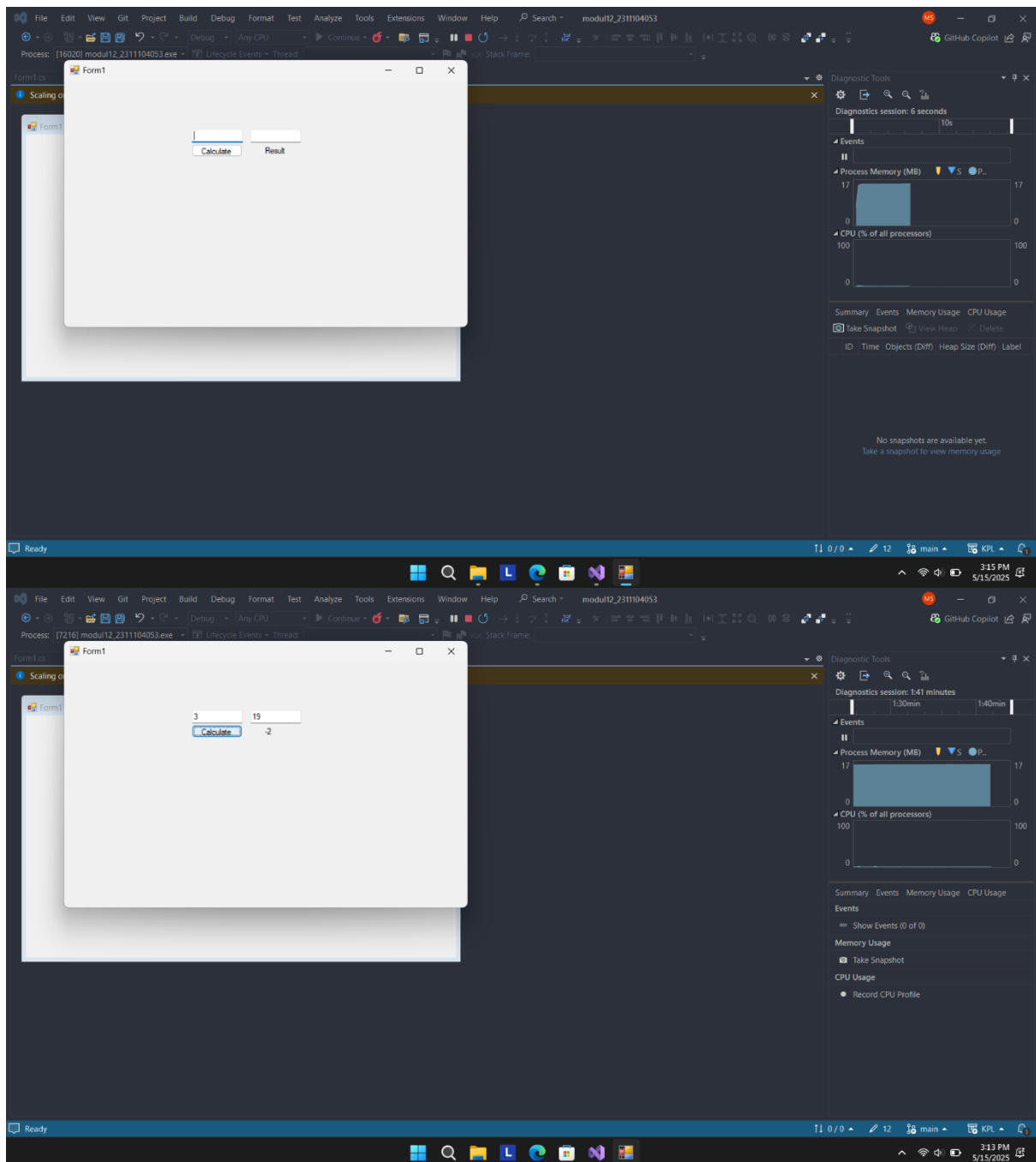
Kelas: SE07-02

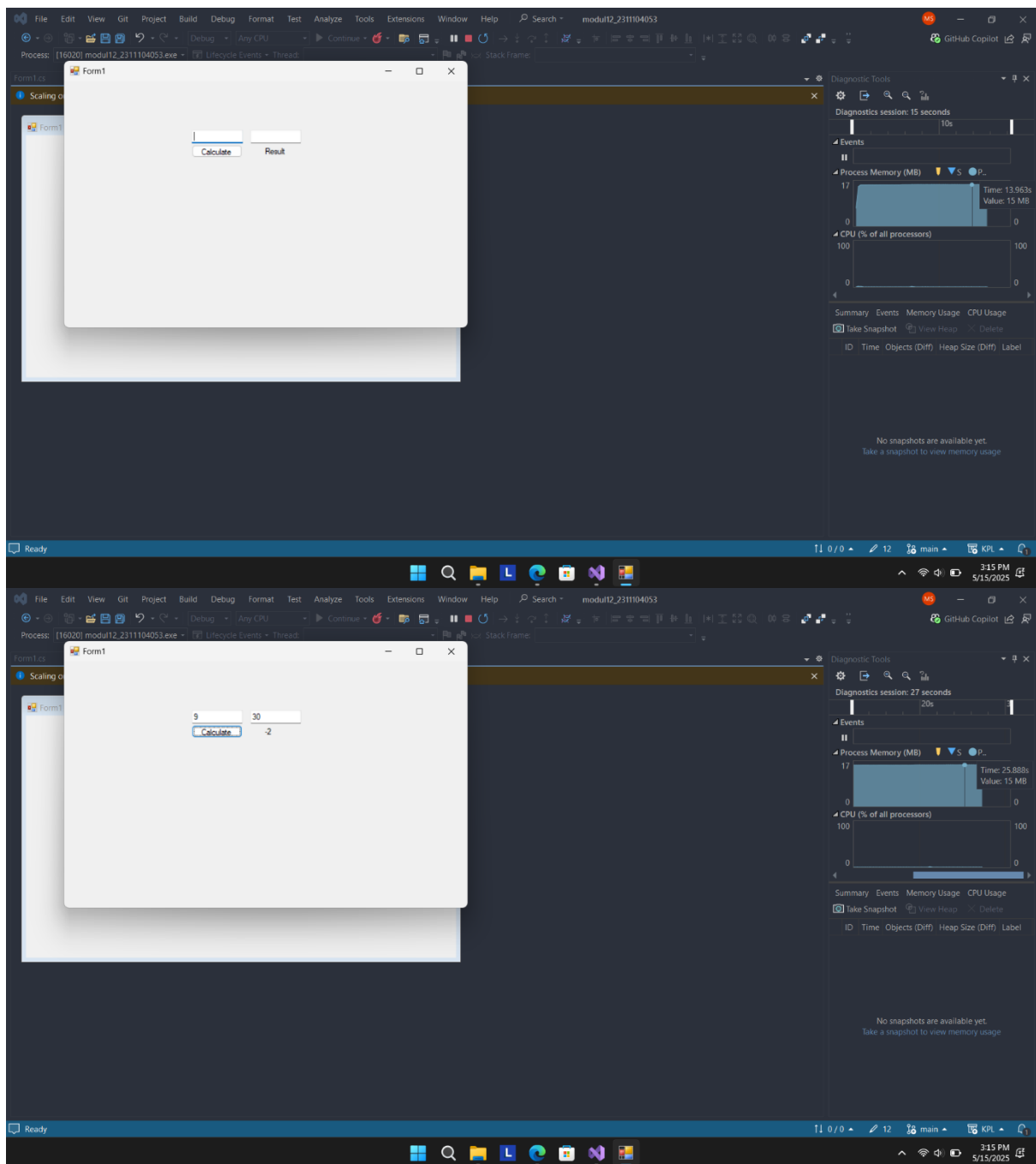
## JURNAL MODUL 12

Link github:

[https://github.com/Meph1sto14/KPL\\_Marvel\\_Sanjaya\\_Setiawan\\_2311104053\\_SE07-02/tree/b89577c370d82e2a74c09ec51ad431470578c6f9/12\\_Performance\\_Analysis\\_Unit\\_Testing\\_and\\_Debugging/JURNAL/modul12\\_2311104053](https://github.com/Meph1sto14/KPL_Marvel_Sanjaya_Setiawan_2311104053_SE07-02/tree/b89577c370d82e2a74c09ec51ad431470578c6f9/12_Performance_Analysis_Unit_Testing_and_Debugging/JURNAL/modul12_2311104053)

Hasil run:





## Form1.cs

```

1. using System;
2. using System.Windows.Forms;
3.
4. namespace modul12_2311104053
5. {
6.     public partial class Form1 : Form
7.     {
8.         public Form1()
9.         {
10.             InitializeComponent();
11.         }
12.
13.         private void buttonHitung_Click(object sender, EventArgs e)
14.         {
15.             int a = int.Parse(textBox1.Text);

```

```

16.         int b = int.Parse(textBox2.Text);
17.
18.         int hasil = CariNilaiPangkat(a, b);
19.         labelHasil.Text = hasil.ToString();
20.     }
21.
22.     public int CariNilaiPangkat(int a, int b)
23.     {
24.         if (b == 0) return 1;
25.         if (b < 0) return -1;
26.         if (b > 10 || a > 100) return -2;
27.
28.         try
29.         {
30.             checked
31.             {
32.                 int result = 1;
33.                 for (int i = 0; i < b; i++)
34.                 {
35.                     result *= a;
36.                 }
37.                 return result;
38.             }
39.         }
40.         catch (OverflowException)
41.         {
42.             return -3;
43.         }
44.     }
45. }
46. }
47.

```

Penjelasan codingan:

1. buttonHitung\_Click()
  - Membaca dua input angka (a dan b).
  - Memanggil CariNilaiPangkat(a, b).
2. CariNilaiPangkat(int a, int b)
  - 1 → Menghitung hasil  $a^b$  dengan perulangan.
  - 2 → Menangani batasan:
    - $b = 0$  → Hasil 1.
    - $b < 0$  → Error -1.
    - $b > 10$  atau  $a > 100$  → Error -2.
  - 3 → Menggunakan checked untuk menangani overflow (mengembalikan -3 jika terjadi).
3. Hasil ditampilkan di labelHasil.