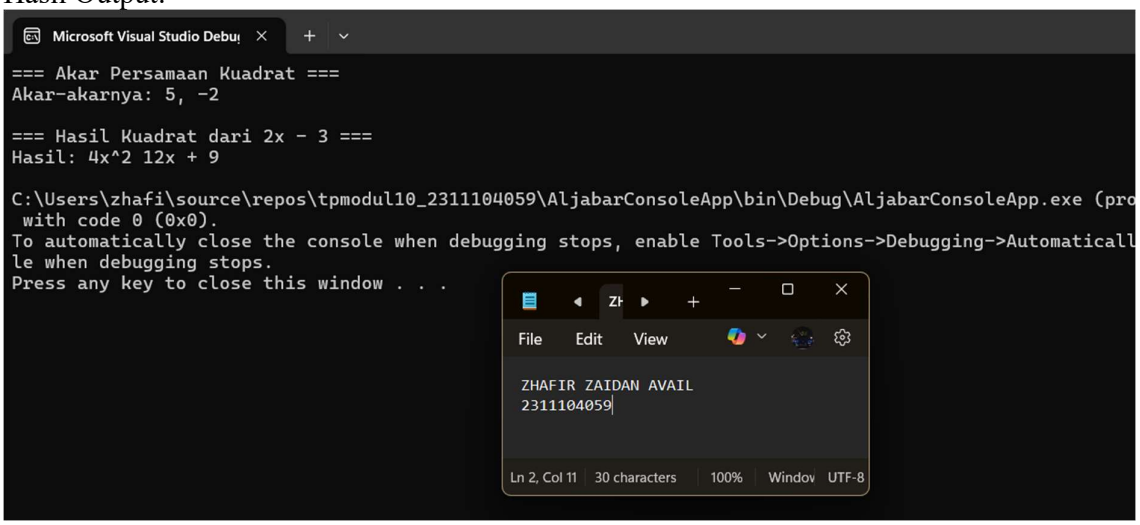
TP MODUL 10

Nama: Zhafir Zaidan Avail
NIM: 2311104059

Hasil Output:



1. Project Class Library AljabarLibraries
   Kode Aljabar.cs:

```
using System;

namespace AljabarLibraries
{
    public class Aljabar
    {
        public static double[] AkarPersamaanKuadrat(double[] persamaan)
        {
            double a = persamaan[0];
            double b = persamaan[1];
            double c = persamaan[2];

            double D = b * b - 4 * a * c;

            if (D < 0) return new double[] { }; // tidak punya akar real

            double akar1 = (-b + Math.Sqrt(D)) / (2 * a);
            double akar2 = (-b - Math.Sqrt(D)) / (2 * a);

            return new double[] { akar1, akar2 };
        }

        public static double[] HasilKuadrat(double[] persamaan)
        {
            double a = persamaan[0];
            double b = persamaan[1];

            double A = a * a;
            double B = 2 * a * b;
            double C = b * b;

            return new double[] { A, -B, C }; // -B karena rumus (a - b)^2
        }
    }
}
```

2. Console App untuk Memanggil Library
   Kode di Program.cs:

```
using System;
using AljabarLibraries;

class Program
{
    static void Main(string[] args)
    {
        Console.WriteLine("=== Akar Persamaan Kuadrat ===");
        double[] akar = Aljabar.AkarPersamaanKuadrat(new double[] { 1, -3, -
10 });
        Console.WriteLine($"Akar-akarnya: {string.Join(", ", akar)}");

        Console.WriteLine("\n=== Hasil Kuadrat dari 2x - 3 ===");
        double[] kuadrat = Aljabar.HasilKuadrat(new double[] { 2, -3 });
        Console.WriteLine($"Hasil:    {kuadrat[0]}x^2    {kuadrat[1]}x    +
{kuadrat[2]}");
    }
}
```