PRAKTIKUM KONSTRUKSI PERANGKAT LUNAK
TUGAS PENDAHULUAN 03

Implementasi Generic Method & Generic Class

Telkom University

disusun Oleh:
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SE0601

S1 REKAYASA PERANGKAT LUNAK
FAKULTAS INFORMATIKA
TELKOM UNIVERSITY
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1. Pendahuluan

Pada praktikum ini, dilakukan implementasi program berbasis Console Application menggunakan C# dengan konsep Generic Class dan Generic Method dalam sebuah kelas. Selain itu, dilakukan juga penggunaan Git untuk manajemen versi kode program serta pembuatan dan pengelolaan branch.

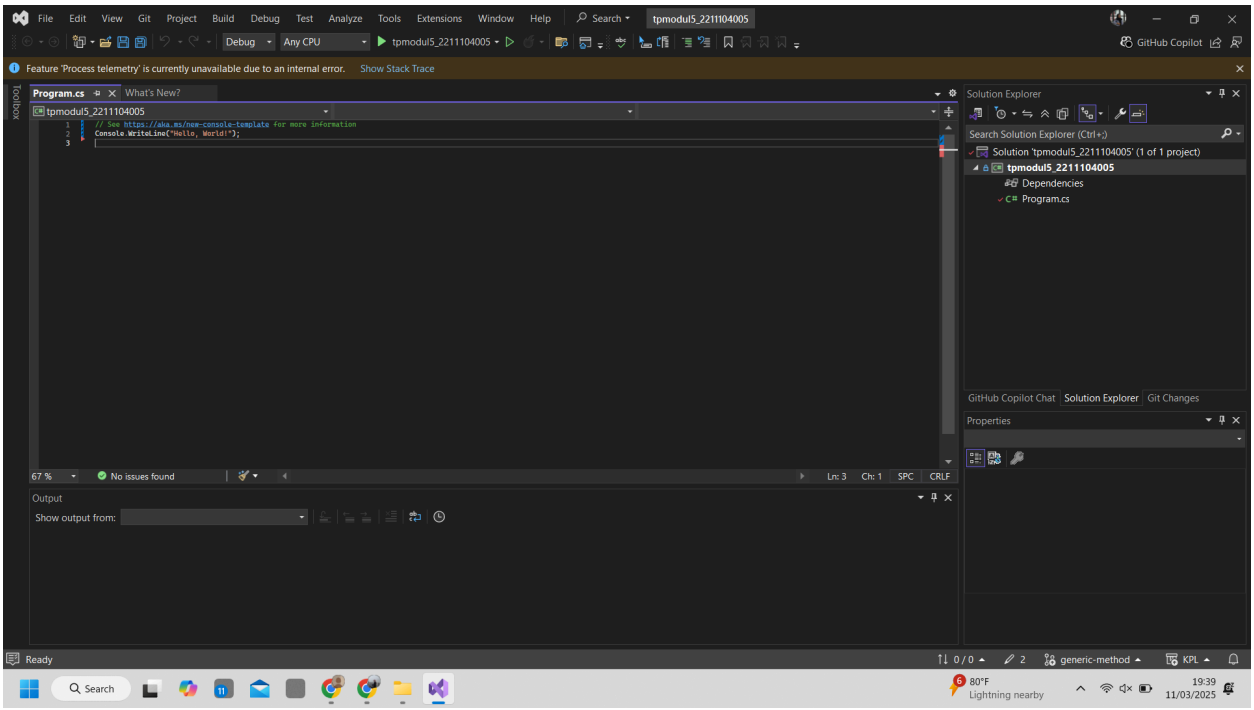
Tujuan:

a. Membuat proyek Console Application di Visual Studio.
b. Mengelola kode menggunakan Git dan GitHub.
c. Membuat branch baru dan mengimplementasikan Generic Method dan Generic Class.
d. Melakukan commit, push, serta merge perubahan ke repository GitHub.

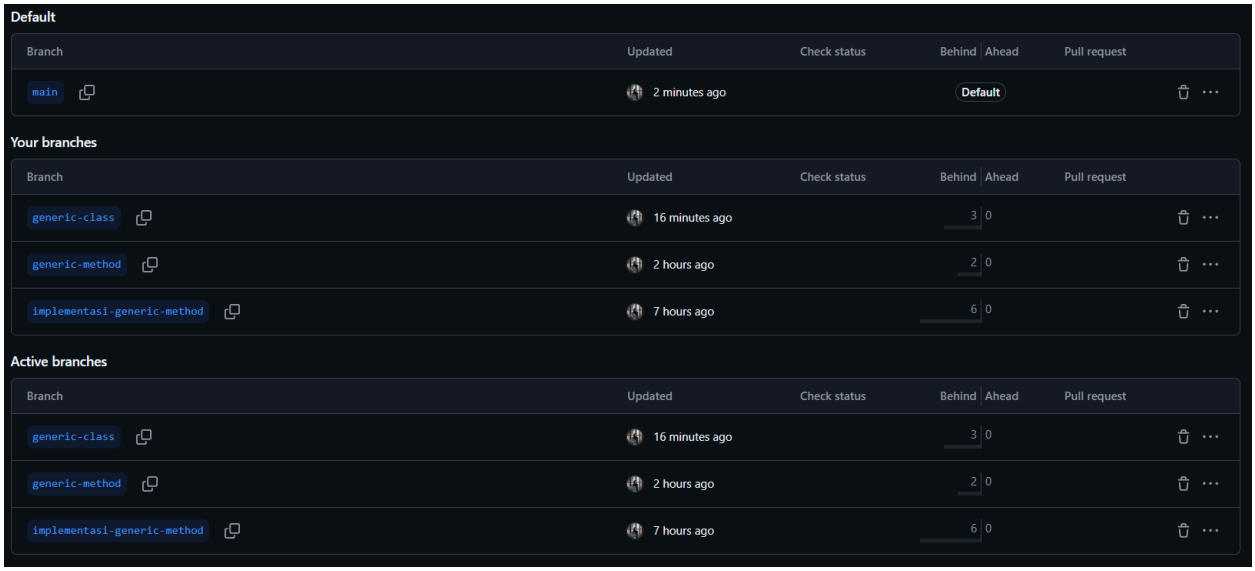
2. Hasil dan Pembahasan

Setelah mengikuti seluruh langkah di atas, hasil yang diperoleh adalah:

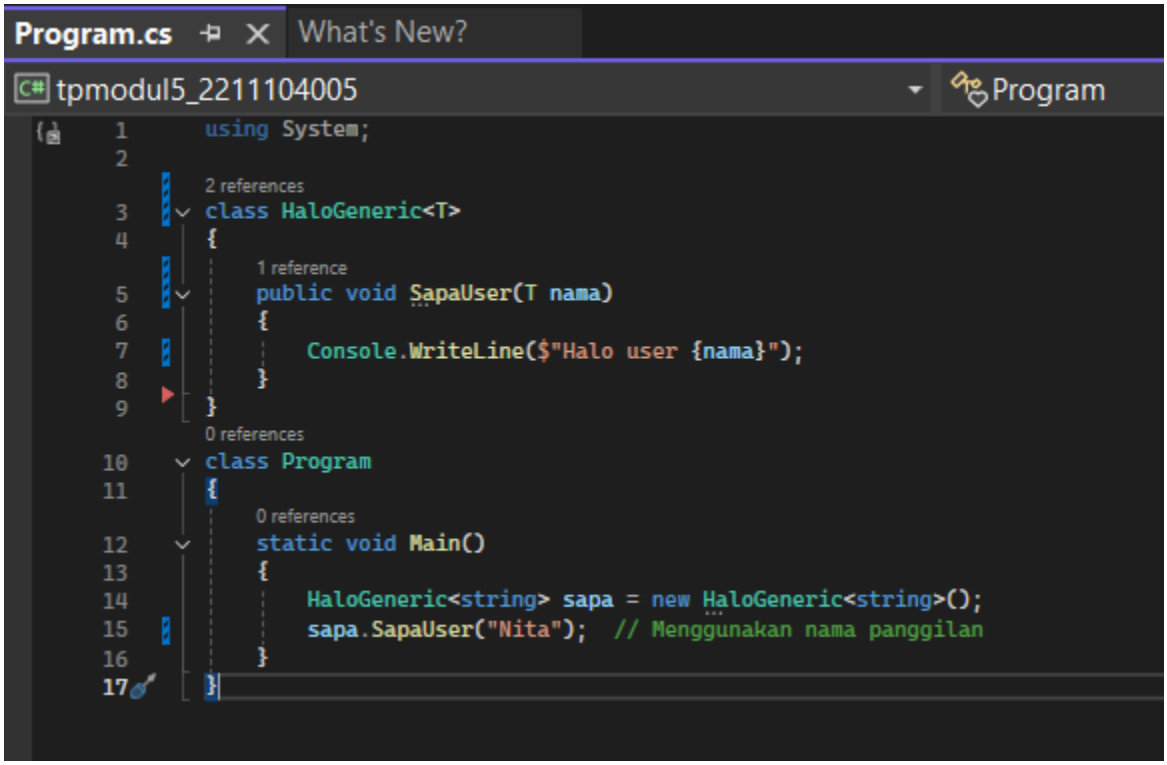
a. Membuat Project Console Application



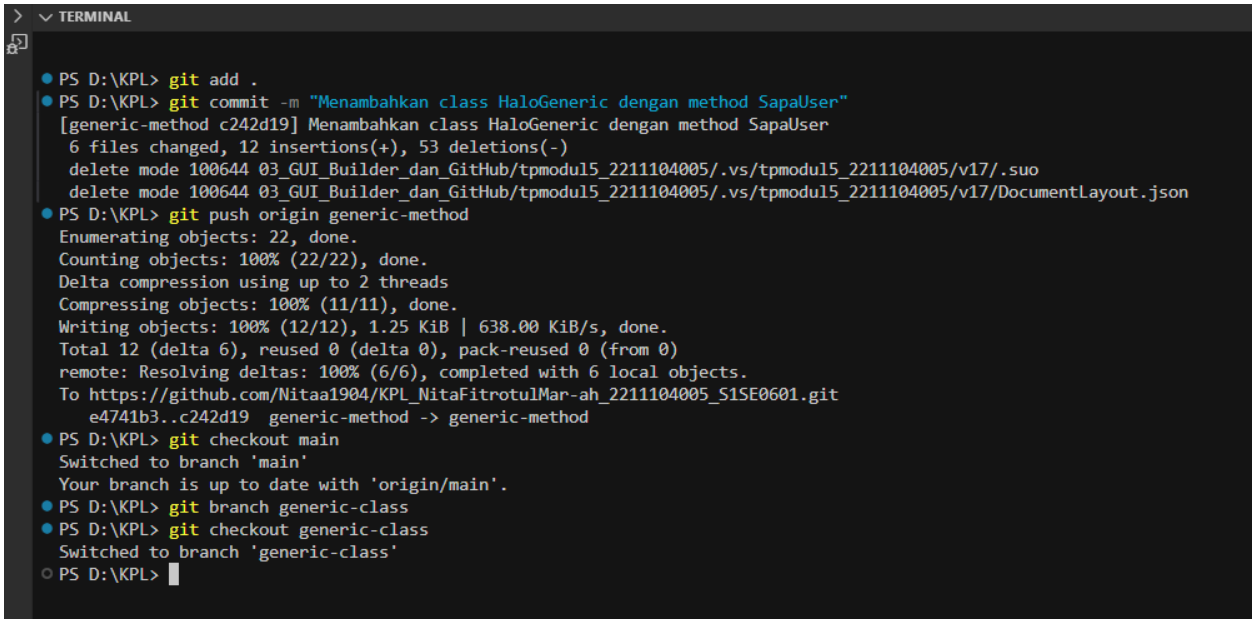
b. Membuat Branch Baru Pada Git Project



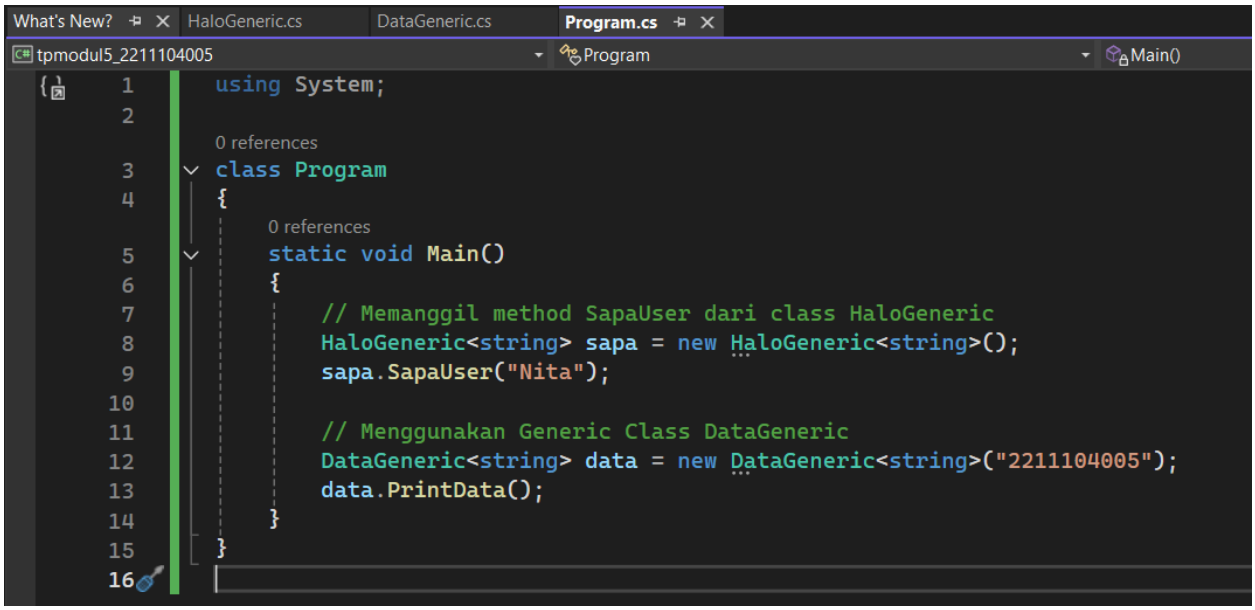
c. Menambahkan Method Dengan Generic

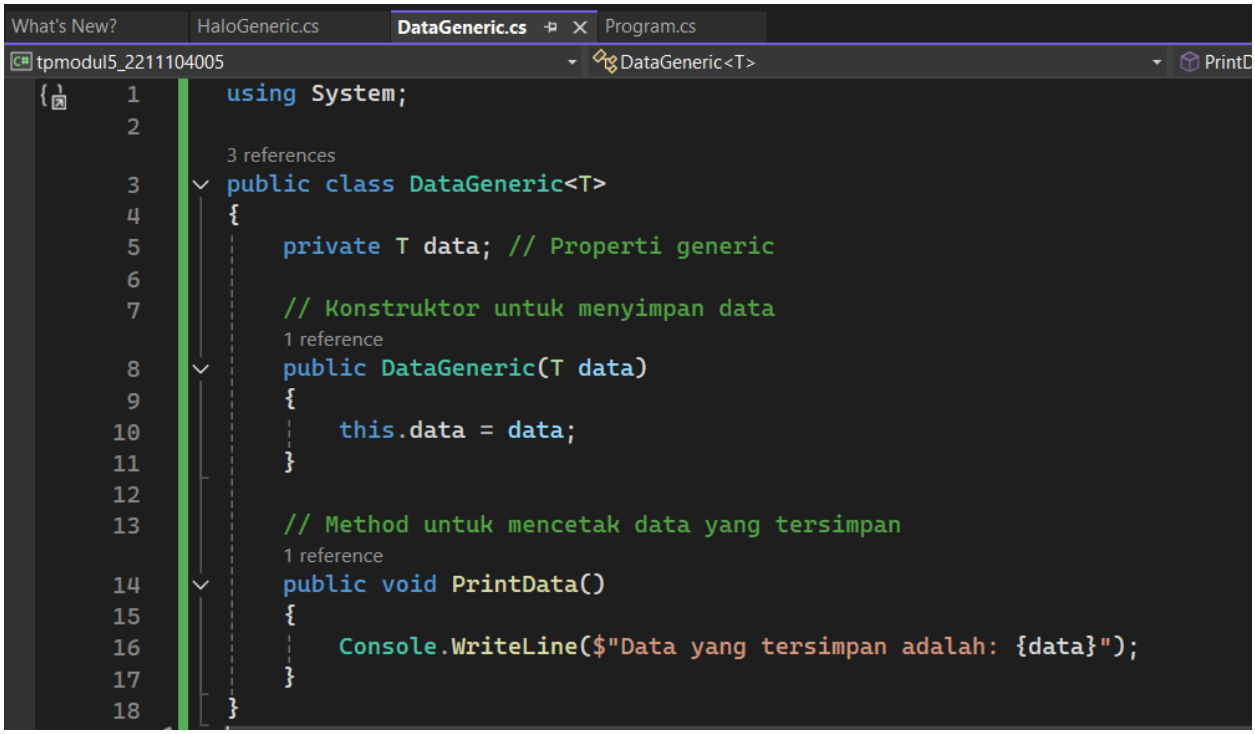


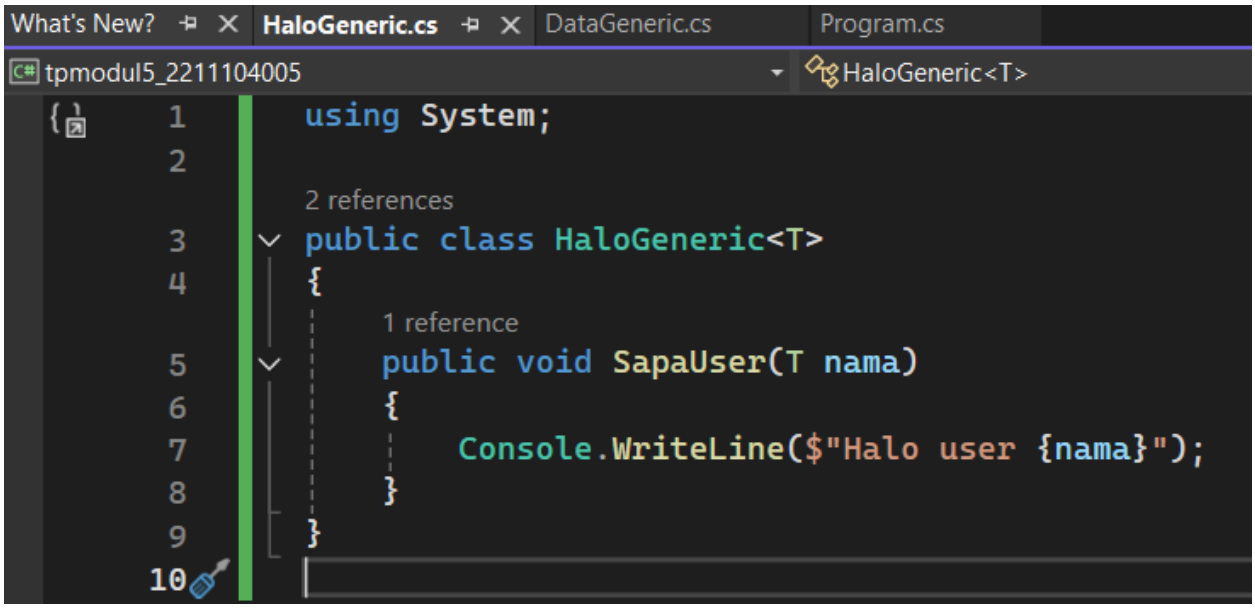
d. Melakukan Commit, Push, Dan Pindah Ke Branch

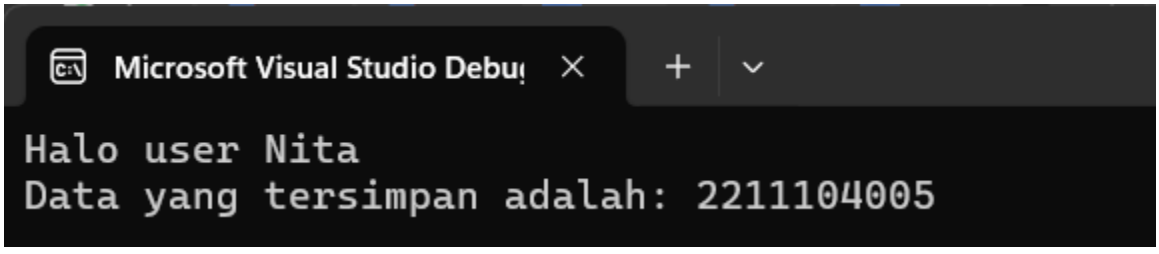


e. Menambahkan Method Dengan Generic Class




What's New?
HaloGeneric.cs
DataGeneric.cs
Program.cs
tpmodul5_2211104005
DataGeneric<T>
using System;
3 references
public class DataGeneric<T>
{
private T data; // Properti generic
// Konstruktor untuk menyimpan data
1 reference
public DataGeneric(T data)
{
this.data = data;
}
// Method untuk mencetak data yang tersimpan
1 reference
public void PrintData()
{
Console.WriteLine($"Data yang tersimpan adalah: {data}");
}
}


What's New?
HaloGeneric.cs
DataGeneric.cs
Program.cs
tpmodul5_2211104005
HaloGeneric<T>
using System;
2 references
public class HaloGeneric<T>
{
1 reference
public void SapaUser(T nama)
{
Console.WriteLine($"Halo user {nama}");
}
}


Microsoft Visual Studio Debu
Halo user Nita
Data yang tersimpan adalah: 2211104005

f. Melakukan Commit, Push, Dan Pindah Branch Bagian 2

```
PROBLEMS  OUTPUT  TERMINAL  PORTS

TERMINAL

PS D:\KPL> git add .
PS D:\KPL> git commit -m "Menambahkan class DataGeneric"
[generic-class d9af1c6] Menambahkan class DataGeneric
 31 files changed, 359 insertions(+)
 create mode 100644 03_GUI_Builder_dan_GitHub/tpmodul5_2211104005/tpmodul5_2211104005.sln
 create mode 100644 03_GUI_Builder_dan_GitHub/tpmodul5_2211104005/tpmodul5_2211104005/DataGeneric.cs
 create mode 100644 03_GUI_Builder_dan_GitHub/tpmodul5_2211104005/tpmodul5_2211104005/HaloGeneric.cs
 create mode 100644 03_GUI_Builder_dan_GitHub/tpmodul5_2211104005/tpmodul5_2211104005/Program.cs
 create mode 100644 03_GUI_Builder_dan_GitHub/tpmodul5_2211104005/tpmodul5_2211104005/bin/Debug/net8.0/tpmodul5_2211104005.deps.json
 create mode 100644 03_GUI_Builder_dan_GitHub/tpmodul5_2211104005/tpmodul5_2211104005/bin/Debug/net8.0/tpmodul5_2211104005.dll
 create mode 100644 03_GUI_Builder_dan_GitHub/tpmodul5_2211104005/tpmodul5_2211104005/bin/Debug/net8.0/tpmodul5_2211104005.exe
 create mode 100644 03_GUI_Builder_dan_GitHub/tpmodul5_2211104005/tpmodul5_2211104005/bin/Debug/net8.0/tpmodul5_2211104005.pdb
 create mode 100644 03_GUI_Builder_dan_GitHub/tpmodul5_2211104005/tpmodul5_2211104005/bin/Debug/net8.0/tpmodul5_2211104005.runtimeconfig.json
 create mode 100644 03_GUI_Builder_dan_GitHub/tpmodul5_2211104005/tpmodul5_2211104005/obj/Debug/net8.0/.NETCoreApp,Version=v8.0.AssemblyAttributes.cs
 create mode 100644 03_GUI_Builder_dan_GitHub/tpmodul5_2211104005/tpmodul5_2211104005/obj/Debug/net8.0/apphost.exe
 create mode 100644 03_GUI_Builder_dan_GitHub/tpmodul5_2211104005/tpmodul5_2211104005/obj/Debug/net8.0/ref/tpmodul5_2211104005.dll
 create mode 100644 03_GUI_Builder_dan_GitHub/tpmodul5_2211104005/tpmodul5_2211104005/obj/Debug/net8.0/refint/tpmodul5_2211104005.dll
 create mode 100644 03_GUI_Builder_dan_GitHub/tpmodul5_2211104005/tpmodul5_2211104005/obj/Debug/net8.0/tpmodul5_2211104005.AssemblyInfo.cs
 create mode 100644 03_GUI_Builder_dan_GitHub/tpmodul5_2211104005/tpmodul5_2211104005/obj/Debug/net8.0/tpmodul5_2211104005.AssemblyInfoInputs.cache
 create mode 100644 03_GUI_Builder_dan_GitHub/tpmodul5_2211104005/tpmodul5_2211104005/obj/Debug/net8.0/tpmodul5_2211104005.GeneratedMSBuildEditorConfig.editorconfig
 create mode 100644 03_GUI_Builder_dan_GitHub/tpmodul5_2211104005/tpmodul5_2211104005/obj/Debug/net8.0/tpmodul5_2211104005.GlobalUsings.g.cs
 create mode 100644 03_GUI_Builder_dan_GitHub/tpmodul5_2211104005/tpmodul5_2211104005/obj/Debug/net8.0/tpmodul5_2211104005.assets.cache
 create mode 100644 03_GUI_Builder_dan_GitHub/tpmodul5_2211104005/tpmodul5_2211104005/obj/Debug/net8.0/tpmodul5_2211104005.csproj.BuildWithSkipAnalyzers
 create mode 100644 03_GUI_Builder_dan_GitHub/tpmodul5_2211104005/tpmodul5_2211104005/obj/Debug/net8.0/tpmodul5_2211104005.csproj.CoreCompileInputs.cache
 create mode 100644 03_GUI_Builder_dan_GitHub/tpmodul5_2211104005/tpmodul5_2211104005/obj/Debug/net8.0/tpmodul5_2211104005.csproj.FileListAbsolute.txt
 create mode 100644 03_GUI_Builder_dan_GitHub/tpmodul5_2211104005/tpmodul5_2211104005/obj/Debug/net8.0/tpmodul5_2211104005.dll
 create mode 100644 03_GUI_Builder_dan_GitHub/tpmodul5_2211104005/tpmodul5_2211104005/obj/Debug/net8.0/tpmodul5_2211104005.genruntimeconfig.cache
 create mode 100644 03_GUI_Builder_dan_GitHub/tpmodul5_2211104005/tpmodul5_2211104005/obj/Debug/net8.0/tpmodul5_2211104005.pdb
 create mode 100644 03_GUI_Builder_dan_GitHub/tpmodul5_2211104005/tpmodul5_2211104005/obj/Debug/net8.0/tpmodul5_2211104005.sourcelink.json
 create mode 100644 03_GUI_Builder_dan_GitHub/tpmodul5_2211104005/tpmodul5_2211104005/obj/project.assets.json
 create mode 100644 03_GUI_Builder_dan_GitHub/tpmodul5_2211104005/tpmodul5_2211104005/obj/project.nuget.cache
 create mode 100644 03_GUI_Builder_dan_GitHub/tpmodul5_2211104005/tpmodul5_2211104005/obj/tpmodul5_2211104005.csproj.nuget.dgspec.json
 create mode 100644 03_GUI_Builder_dan_GitHub/tpmodul5_2211104005/tpmodul5_2211104005/obj/tpmodul5_2211104005.csproj.nuget.g.props
 create mode 100644 03_GUI_Builder_dan_GitHub/tpmodul5_2211104005/tpmodul5_2211104005/obj/tpmodul5_2211104005.csproj.nuget.g.targets
 create mode 100644 03_GUI_Builder_dan_GitHub/tpmodul5_2211104005/tpmodul5_2211104005/tpmodul5_2211104005.csproj
PS D:\KPL> git push origin generic-class
Enumerating objects: 40, done.
Counting objects: 100% (40/40), done.
Delta compression using up to 2 threads
Compressing objects: 100% (35/35), done.
Writing objects: 100% (38/38), 78.62 KiB | 128.00 KiB/s, done.
Total 38 (delta 3), reused 0 (delta 0), pack-reused 0 (from 0)
remote: Resolving deltas: 100% (3/3), completed with 1 local object.
remote:
remote: Create a pull request for 'generic-class' on GitHub by visiting:
remote:      https://github.com/Nitaa1904/KPL_NitaFitrotulMar-ah_2211104005_S1SE0601/pull/new/generic-class
remote:
To https://github.com/Nitaa1904/KPL_NitaFitrotulMar-ah_2211104005_S1SE0601.git
 * [new branch]      generic-class -> generic-class
```

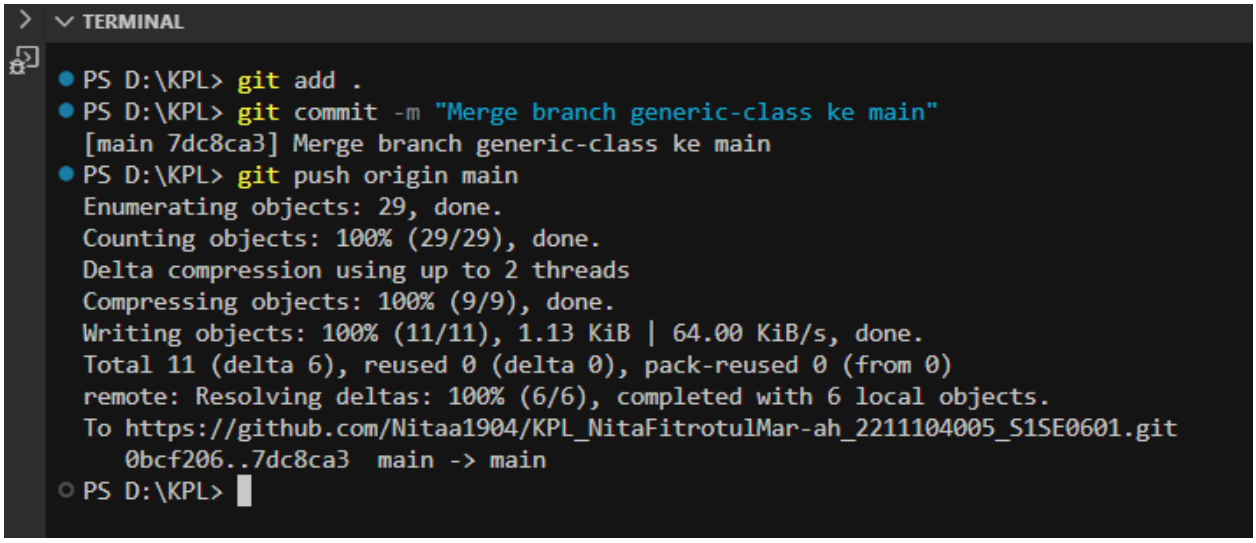
g. Melakukan Git Merge Dari Kedua Branch Baru

```
PROBLEMS  OUTPUT  TERMINAL  PORTS

TERMINAL

PS D:\KPL> git merge generic-method
Updating 0bcf206..c242d19
Fast-forward
 .../03_Jurnal_GUI_Builder_dan_GitHub.pdf           | Bin 0 -> 644005 bytes
 .../tpmodul5_2211104005/tpmodul5_2211104005.sln    |  25 +++++++
 .../tpmodul5_2211104005/Program.cs                 |  17 +++++
 .../.NETCoreApp,Version=v8.0.AssemblyAttributes.cs |   4 ++
 .../net8.0/tpmodul5_2211104005.AssemblyInfo.cs     |  23 ++++++
 .../tpmodul5_2211104005.AssemblyInfoInputs.cache   |   1 +
 ...04005.GeneratedMSBuildEditorConfig.editorconfig |  15 ++++
 .../net8.0/tpmodul5_2211104005.GlobalUsings.g.cs   |   8 +++
 .../Debug/net8.0/tpmodul5_2211104005.assets.cache  | Bin 0 -> 227 bytes
 .../tpmodul5_2211104005/obj/project.assets.json    |  79 ++++++++++++++++++++++
 .../tpmodul5_2211104005/obj/project.nuget.cache    |   8 +++
 .../tpmodul5_2211104005.csproj.nuget.dgspec.json   |  73 ++++++++++++++++++++
 .../obj/tpmodul5_2211104005.csproj.nuget.g.props   |  16 +++++
 .../obj/tpmodul5_2211104005.csproj.nuget.g.targets |   2 +
 .../tpmodul5_2211104005/tpmodul5_2211104005.csproj |  10 +++
 15 files changed, 281 insertions(+)
 create mode 100644 03_GUI_Builder_dan_GitHub/03_Jurnal_GUI_Builder_dan_GitHub.pdf
 create mode 100644 03_GUI_Builder_dan_GitHub/tpmodul5_2211104005/tpmodul5_2211104005.sln
 create mode 100644 03_GUI_Builder_dan_GitHub/tpmodul5_2211104005/tpmodul5_2211104005/Program.cs
 create mode 100644 03_GUI_Builder_dan_GitHub/tpmodul5_2211104005/tpmodul5_2211104005/obj/Debug/net8.0/.NETCoreApp,Version=v8.0.AssemblyAttributes.cs
 create mode 100644 03_GUI_Builder_dan_GitHub/tpmodul5_2211104005/tpmodul5_2211104005/obj/Debug/net8.0/tpmodul5_2211104005.AssemblyInfo.cs
 create mode 100644 03_GUI_Builder_dan_GitHub/tpmodul5_2211104005/tpmodul5_2211104005/obj/Debug/net8.0/tpmodul5_2211104005.AssemblyInfoInputs.cache
 create mode 100644 03_GUI_Builder_dan_GitHub/tpmodul5_2211104005/tpmodul5_2211104005/obj/Debug/net8.0/tpmodul5_2211104005.GeneratedMSBuildEditorConfig.editorconfi
 create mode 100644 03_GUI_Builder_dan_GitHub/tpmodul5_2211104005/tpmodul5_2211104005/obj/Debug/net8.0/tpmodul5_2211104005.GlobalUsings.g.cs
 create mode 100644 03_GUI_Builder_dan_GitHub/tpmodul5_2211104005/tpmodul5_2211104005/obj/Debug/net8.0/tpmodul5_2211104005.assets.cache
 create mode 100644 03_GUI_Builder_dan_GitHub/tpmodul5_2211104005/tpmodul5_2211104005/obj/project.assets.json
 create mode 100644 03_GUI_Builder_dan_GitHub/tpmodul5_2211104005/tpmodul5_2211104005/obj/project.nuget.cache
 create mode 100644 03_GUI_Builder_dan_GitHub/tpmodul5_2211104005/tpmodul5_2211104005/obj/tpmodul5_2211104005.csproj.nuget.dgspec.json
 create mode 100644 03_GUI_Builder_dan_GitHub/tpmodul5_2211104005/tpmodul5_2211104005/obj/tpmodul5_2211104005.csproj.nuget.g.props
 create mode 100644 03_GUI_Builder_dan_GitHub/tpmodul5_2211104005/tpmodul5_2211104005/obj/tpmodul5_2211104005.csproj.nuget.g.targets
 create mode 100644 03_GUI_Builder_dan_GitHub/tpmodul5_2211104005/tpmodul5_2211104005/tpmodul5_2211104005.csproj
PS D:\KPL> git merge generic-class
Auto-merging 03_GUI_Builder_dan_GitHub/tpmodul5_2211104005/tpmodul5_2211104005.sln
CONFLICT (add/add): Merge conflict in 03_GUI_Builder_dan_GitHub/tpmodul5_2211104005/tpmodul5_2211104005.sln
Auto-merging 03_GUI_Builder_dan_GitHub/tpmodul5_2211104005/tpmodul5_2211104005/Program.cs
CONFLICT (add/add): Merge conflict in 03_GUI_Builder_dan_GitHub/tpmodul5_2211104005/tpmodul5_2211104005/Program.cs
Auto-merging 03_GUI_Builder_dan_GitHub/tpmodul5_2211104005/tpmodul5_2211104005/obj/Debug/net8.0/tpmodul5_2211104005.AssemblyInfo.cs
CONFLICT (add/add): Merge conflict in 03_GUI_Builder_dan_GitHub/tpmodul5_2211104005/tpmodul5_2211104005/obj/Debug/net8.0/tpmodul5_2211104005.AssemblyInfo.cs
Auto-merging 03_GUI_Builder_dan_GitHub/tpmodul5_2211104005/tpmodul5_2211104005/obj/Debug/net8.0/tpmodul5_2211104005.AssemblyInfoInputs.cache
CONFLICT (add/add): Merge conflict in 03_GUI_Builder_dan_GitHub/tpmodul5_2211104005/tpmodul5_2211104005/obj/Debug/net8.0/tpmodul5_2211104005.Assem
Automatic merge failed; fix conflicts and then commit the result.
```

Do you want to in


TERMINAL
PS D:\KPL> git add .
PS D:\KPL> git commit -m "Merge branch generic-class ke main"
[main 7dc8ca3] Merge branch generic-class ke main
PS D:\KPL> git push origin main
Enumerating objects: 29, done.
Counting objects: 100% (29/29), done.
Delta compression using up to 2 threads
Compressing objects: 100% (9/9), done.
Writing objects: 100% (11/11), 1.13 KiB | 64.00 KiB/s, done.
Total 11 (delta 6), reused 0 (delta 0), pack-reused 0 (from 0)
remote: Resolving deltas: 100% (6/6), completed with 6 local objects.
To https://github.com/Nitaa1904/KPL_NitaFitrotulMar-ah_2211104005_S1SE0601.git
0bcf206..7dc8ca3 main -> main
PS D:\KPL>