

**PRAKTIKUM KONSTRUKSI PERANGKAT LUNAK
TUGAS PENDAHULUAN 05**

Generics



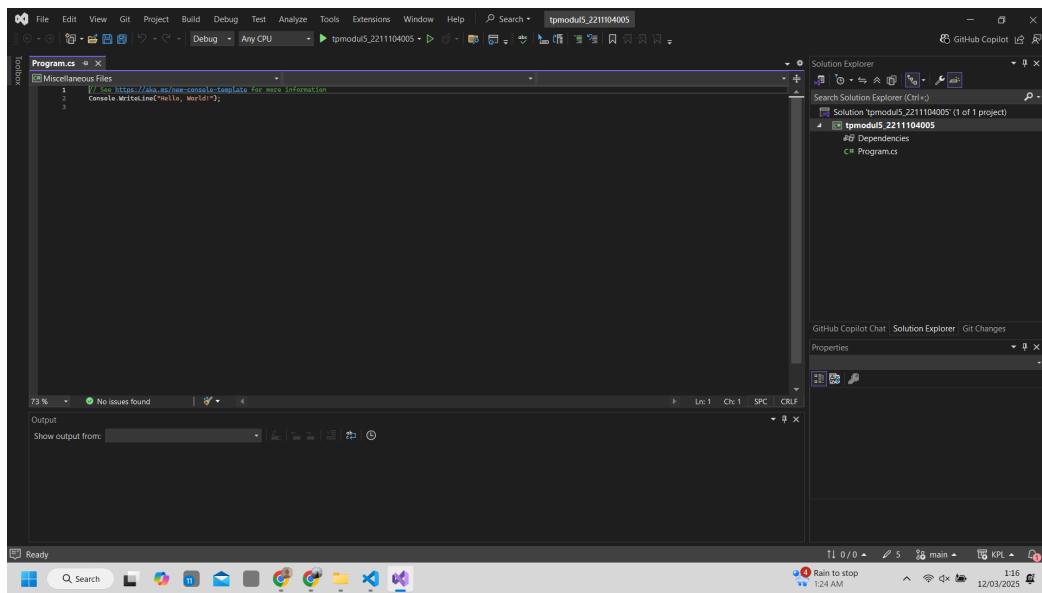
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SE0601

**S1 REKAYASA PERANGKAT LUNAK
FAKULTAS INFORMATIKA
TELKOM UNIVERSITY
2025**

1. Membuat Project Console/Tanpa Gui



2. Membuat Branch Baru Pada Git Project

```
● PS D:\KPL> git branch generic-method2
② PS D:\KPL> git checkout generic-method
error: The following untracked working tree files would be overwritten by checkout:
      05_Generics\tpmodul5_2211104005\tpmodul5_2211104005\Program.cs
Please move or remove them before you switch branches.
Aborting
● PS D:\KPL> git checkout generic-method2
Switched to branch 'generic-method2'
○ PS D:\KPL> █
```

3. Menambahkan Method Dengan Generic

```
1  using System;
2
3  class HaloGeneric
4  {
5      public void SapaUser<T>(T user)
6      {
7          Console.WriteLine($"Halo user {user}");
8      }
9  }
10
11 class Program
12 {
13     static void Main(string[] args)
14     {
15         HaloGeneric halo = new HaloGeneric();
16         halo.SapaUser("[Nama Panggilan]");
17     }
18 █
```

4. Melakukan Commit, Push, Dan Pindah Ke Branch

```
● PS D:\KPL> git add 05_Generics/tpmodul5_2211104005/tpmodul5_2211104005/Program.cs
● PS D:\KPL> git commit -m "Menambahkan class HaloGeneric dengan method SapalUser"
On branch generic-method
Your branch is ahead of 'origin/generic-method' by 1 commit.
  (use "git push" to publish your local commits)

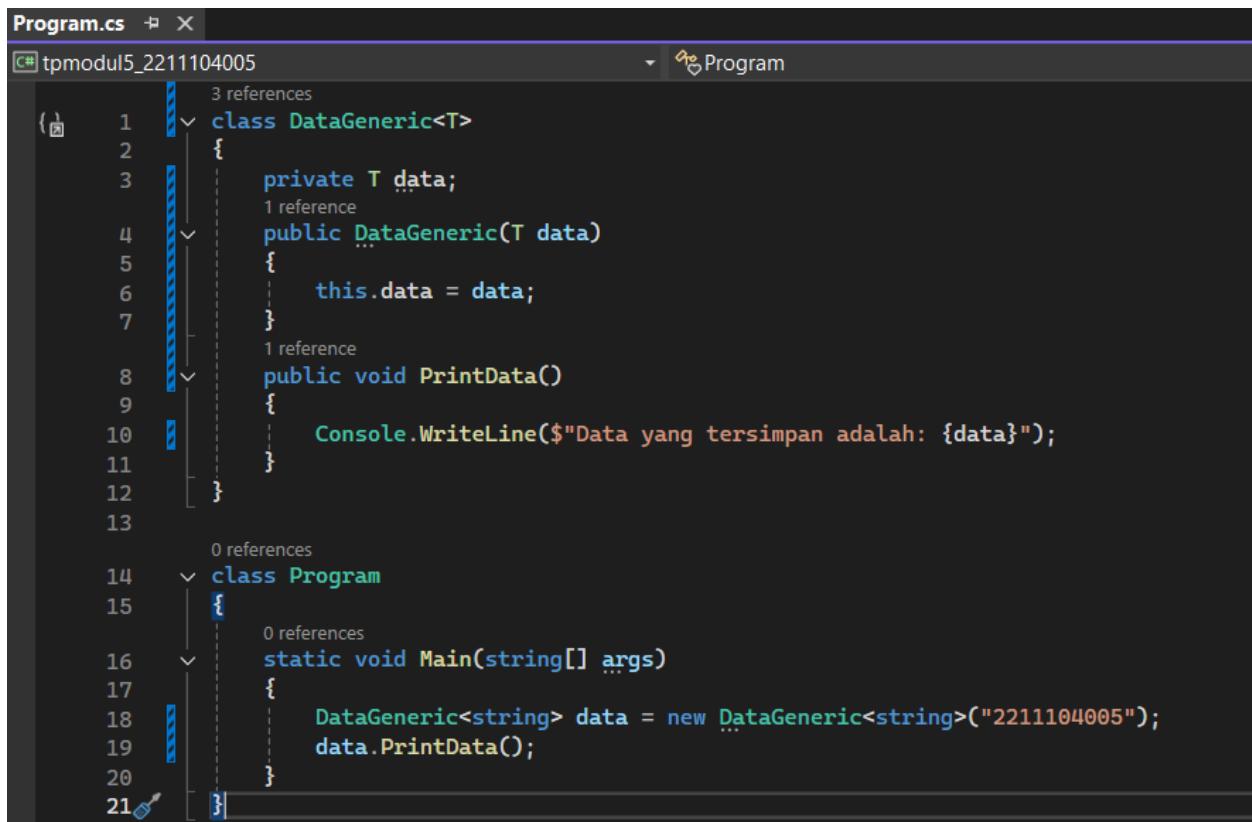
Untracked files:
  (use "git add <file>..." to include in what will be committed)
    05_Generics/tpmodul5_2211104005/.vs/
    05_Generics/tpmodul5_2211104005/tpmodul5_2211104005.sln
    05_Generics/tpmodul5_2211104005/tpmodul5_2211104005/obj/
    05_Generics/tpmodul5_2211104005/tpmodul5_2211104005/tpmodul5_2211104005.csproj

nothing added to commit but untracked files present (use "git add" to track)
● PS D:\KPL> git push origin generic-method
Enumerating objects: 8, done.
Counting objects: 100% (8/8), done.
Delta compression using up to 2 threads
Compressing objects: 100% (4/4), done.
Writing objects: 100% (6/6), 688 bytes | 62.00 KiB/s, done.
Total 6 (delta 1), reused 0 (delta 0), pack-reused 0 (from 0)
remote: Resolving deltas: 100% (1/1), completed with 1 local object.
To https://github.com/Nitaa1904/KPL_NitaFitrotulMar-ah_2211104005_S1SE0601.git
  c242d19..080f281 generic-method -> generic-method
● PS D:\KPL> git checkout main
Switched to branch 'main'
Your branch is up to date with 'origin/main'.
● PS D:\KPL> git branch generic-class
fatal: a branch named 'generic-class' already exists
● PS D:\KPL> git checkout generic-class
Switched to branch 'generic-class'
○ PS D:\KPL> █
```

5. Menambahkan Method Dengan Generic

```
● PS D:\KPL> git add 05_Generics/tpmodul5_2211104005/tpmodul5_2211104005/Program.cs
● PS D:\KPL> git push origin generic-method
Enumerating objects: 8, done.
Counting objects: 100% (8/8), done.
Delta compression using up to 2 threads
Compressing objects: 100% (4/4), done.
Writing objects: 100% (6/6), 688 bytes | 98.00 KiB/s, done.
Total 6 (delta 1), reused 0 (delta 0), pack-reused 0 (from 0)
remote: Resolving deltas: 100% (1/1), completed with 1 local object.
remote:
remote: Create a pull request for 'generic-method' on GitHub by visiting:
remote:   https://github.com/Nitaa1904/KPL_NitaFitrotulMar-ah_2211104005_S1SE0601/pull/new/generic-method
remote:
To https://github.com/Nitaa1904/KPL_NitaFitrotulMar-ah_2211104005_S1SE0601.git
 * [new branch]      generic-method -> generic-method
● PS D:\KPL> git checkout main
A      05_Generics/tpmodul5_2211104005/tpmodul5_2211104005/Program.cs
Switched to branch 'main'
Your branch is up to date with 'origin/main'.
● PS D:\KPL> git branch generic-class2
● PS D:\KPL> git checkout generic-class2
A      05_Generics/tpmodul5_2211104005/tpmodul5_2211104005/Program.cs
Switched to branch 'generic-class2'
○ PS D:\KPL> █
```

6. Menambahkan Method Dengan Generic



```
Program.cs  X
C# tpmodul5_2211104005                                ↴ Program
1   3 references
2     1 ✓ class DataGeneric<T>
3       {
4         private T data;
5           1 reference
6           public DataGeneric(T data)
7             {
8               this.data = data;
9             }
10          1 reference
11          public void PrintData()
12            {
13              Console.WriteLine($"Data yang tersimpan adalah: {data}");
14            }
15
16  0 references
17    0 references
18    class Program
19      {
20        0 references
21        static void Main(string[] args)
22        {
23          DataGeneric<string> data = new DataGeneric<string>("2211104005");
24          data.PrintData();
25        }
26      }
27
```

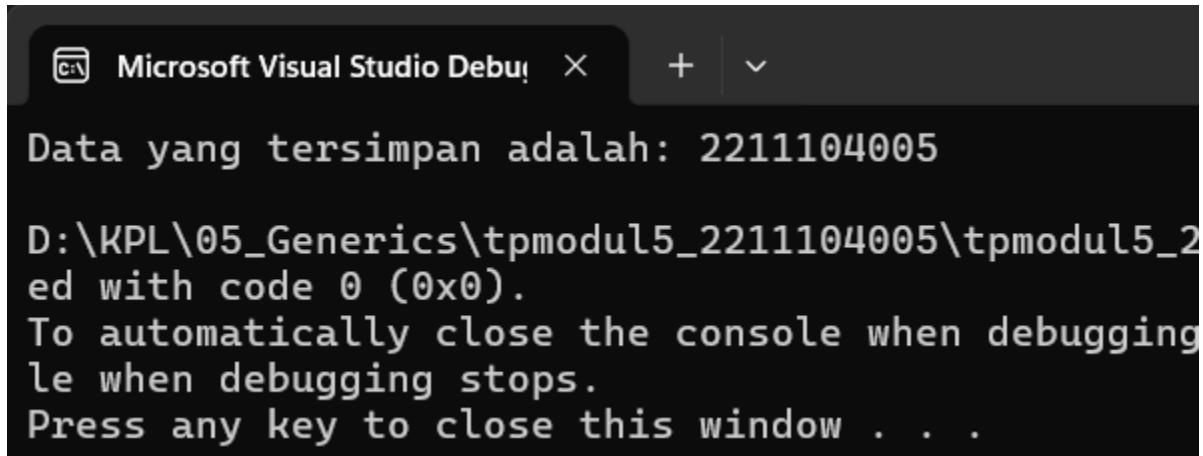
7. Melakukan Commit, Push, Dan Pindah Branch Bagian 2

```
● PS D:\KPL> git add 05_Generics\tpmodul5_2211104005\tpmodul5_2211104005\Program.cs
● PS D:\KPL> git commit -m "Menambahkan class DataGeneric"
[generic-class2 185ca6a] Menambahkan class DataGeneric
 1 file changed, 21 insertions(+)
 create mode 100644 05_Generics\tpmodul5_2211104005\tpmodul5_2211104005\Program.cs
● PS D:\KPL> git push origin generic-class
Everything up-to-date
● PS D:\KPL> git push origin generic-class2
Enumerating objects: 8, done.
Counting objects: 100% (8/8), done.
Delta compression using up to 2 threads
Compressing objects: 100% (4/4), done.
Writing objects: 100% (6/6), 680 bytes | 680.00 KiB/s, done.
Total 6 (delta 2), reused 0 (delta 0), pack-reused 0 (from 0)
remote: Resolving deltas: 100% (2/2), completed with 2 local objects.
remote:
remote: Create a pull request for 'generic-class2' on GitHub by visiting:
remote:     https://github.com/Nitaa1904/KPL_NitaFitrotulMar-ah_2211104005_S1SE0601/pull/new/generic-class2
remote:
To https://github.com/Nitaa1904/KPL_NitaFitrotulMar-ah_2211104005_S1SE0601.git
 * [new branch]      generic-class2 -> generic-class2
● PS D:\KPL> git checkout main
Switched to branch 'main'
Your branch is up to date with 'origin/main'.
○ PS D:\KPL>
```

8. Melakukan Git Merge Dari Kedua Branch Baru

```
● PS D:\KPL> git merge generic-method2
  Already up to date.
● PS D:\KPL> git merge generic-class2
  Updating 003b6de..185ca6a
    Fast-forward
      .../tpmodul5_2211104005/Program.cs | 21 ++++++
      1 file changed, 21 insertions(+)
      create mode 100644 05_Generics/tpmodul5_2211104005/tpmodul5_2211104005/Program.cs
● PS D:\KPL> git push origin main
  Total 0 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
  To https://github.com/Nitaa1904/KPL_NitaFitrotulMar-ah_2211104005_S1SE0601.git
    003b6de..185ca6a  main -> main
○ PS D:\KPL>
```

9. Screenshot Hasil Run



The screenshot shows a Microsoft Visual Studio Debug console window. The title bar says "Microsoft Visual Studio Debug". The console output is as follows:

```
Data yang tersimpan adalah: 2211104005

D:\KPL\05_Generics\tpmodul5_2211104005\tpmodul5_2
ed with code 0 (0x0).
To automatically close the console when debugging
le when debugging stops.
Press any key to close this window . . .
```