

**TUGAS PENDAHULUAN
MODUL 5**



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I. Link Github

- https://github.com/Izzaaaaaaaaa/TPMODUL5_2311104052.git

II. Code & Hasil Running

```
*****
** Visual Studio 2022 Developer Command Prompt v17.13.1
** Copyright (c) 2022 Microsoft Corporation
*****

C:\Users\ASUS\source\repos\KPL_izzatyzahara_2311104052_S1SE-07-02\05_Generics\TPModul5_2311104052>git add .

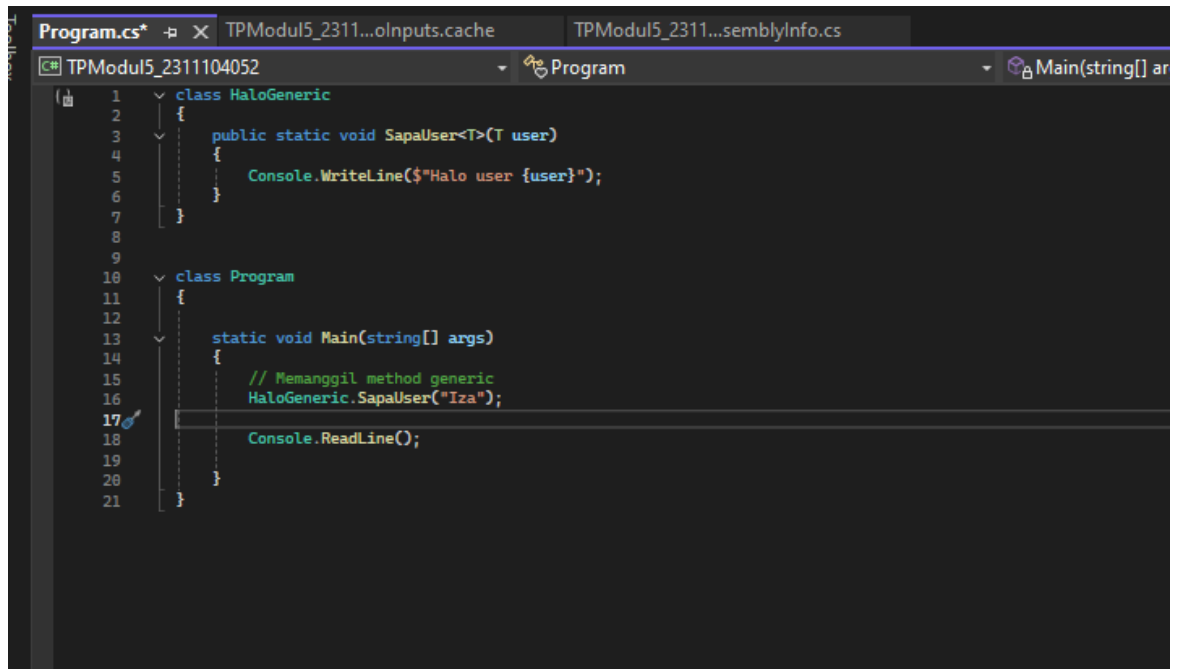
C:\Users\ASUS\source\repos\KPL_izzatyzahara_2311104052_S1SE-07-02\05_Generics\TPModul5_2311104052>git commit -m "Initial commit"
[master 7337018] Initial commit
1 file changed, 0 insertions(+), 0 deletions(-)

C:\Users\ASUS\source\repos\KPL_izzatyzahara_2311104052_S1SE-07-02\05_Generics\TPModul5_2311104052>git push -u origin master
Enumerating objects: 14, done.
Counting objects: 100% (14/14), done.
Delta compression using up to 4 threads
Compressing objects: 100% (7/7), done.
Writing objects: 100% (8/8), 836 bytes | 836.00 KiB/s, done.
Total 8 (delta 4), reused 0 (delta 0), pack-reused 0 (from 0)
remote: Resolving deltas: 100% (4/4), completed with 4 local objects.
To https://github.com/Izzaaaaaaaaa/KPL_izzatyzahara_2311104052_S1SE-07-02.git
92fc81e..7337018 master -> master
branch 'master' set up to track 'origin/master'.

C:\Users\ASUS\source\repos\KPL_izzatyzahara_2311104052_S1SE-07-02\05_Generics\TPModul5_2311104052>git checkout -b generic-method
fatal: a branch named 'generic-method' already exists

C:\Users\ASUS\source\repos\KPL_izzatyzahara_2311104052_S1SE-07-02\05_Generics\TPModul5_2311104052>git branch
generic-method
* master

C:\Users\ASUS\source\repos\KPL_izzatyzahara_2311104052_S1SE-07-02\05_Generics\TPModul5_2311104052>git checkout generic-method
error: Your local changes to the following files would be overwritten by checkout:
TPMODUL5_2311104052/obj/Debug/net8.0/TPMODUL5_2311104052.AssemblyInfo.cs
TPMODUL5_2311104052/obj/Debug/net8.0/TPMODUL5_2311104052.AssemblyInfoInputs.cache
TPMODUL5_2311104052/obj/Debug/net8.0/TPMODUL5_2311104052.GeneratedMSBuildEditorConfig.editorconfig
TPMODUL5_2311104052/obj/Debug/net8.0/TPMODUL5_2311104052.assets.cache
TPMODUL5_2311104052/obj/Release/net8.0/TPMODUL5_2311104052.AssemblyInfo.cs
```



The screenshot shows the Visual Studio code editor with the file `Program.cs` open. The code defines two classes: `HaloGeneric` and `Program`. The `HaloGeneric` class has a static method `SapaUser<T>(T user)` that writes a greeting to the console. The `Program` class has a static `Main` method that calls `HaloGeneric.SapaUser("Iza")` and then reads a line from the console.

```
1 class HaloGeneric
2 {
3     public static void SapaUser<T>(T user)
4     {
5         Console.WriteLine($"Halo user {user}");
6     }
7 }
8
9
10 class Program
11 {
12
13     static void Main(string[] args)
14     {
15         // Memanggil method generic
16         HaloGeneric.SapaUser("Iza");
17
18         Console.ReadLine();
19     }
20 }
21 }
```

```

2311104052
- MS-DOS Batch
- Main (string) args

Microsoft Visual Studio Debu X + -
halo user Iza

C:\Users\ASUS\source\repos\KPL_izzatyzahara_2311104052_S1SE-07-02\05_Generics\TPMODUL5_2311104052\TPModul5_2311104052\bin\Debug\net8.0\TPModul5_2311104052.exe (process 9924) exited with code 0 (0x0).
To automatically close the console when debugging stops, enable Tools->Options->Debugging->Automatically close the console when debugging stops.
Press any key to close this window . . .

```

```

C:\Users\ASUS\source\repos\KPL_izzatyzahara_2311104052_S1SE-07-02\05_Generics\TPMODUL5_2311104052\TPModul5_2311104052>git checkout -b generic-method
Switched to a new branch 'generic-method'

C:\Users\ASUS\source\repos\KPL_izzatyzahara_2311104052_S1SE-07-02\05_Generics\TPMODUL5_2311104052\TPModul5_2311104052>git add .

C:\Users\ASUS\source\repos\KPL_izzatyzahara_2311104052_S1SE-07-02\05_Generics\TPMODUL5_2311104052\TPModul5_2311104052>git commit -m "Menambahkan class HaloGeneric dengan method SapaUser"
On branch generic-method
nothing to commit, working tree clean

C:\Users\ASUS\source\repos\KPL_izzatyzahara_2311104052_S1SE-07-02\05_Generics\TPMODUL5_2311104052\TPModul5_2311104052>git push -u origin generic-method
Enumerating objects: 22, done.
Counting objects: 100% (22/22), done.
Delta compression using up to 4 threads
Compressing objects: 100% (11/11), done.
Writing objects: 100% (12/12), 1.20 KiB | 245.00 KiB/s, done.
Total 12 (delta 7), reused 0 (delta 0), pack-reused 0 (from 0)
remote: Resolving deltas: 100% (7/7), completed with 7 local objects.
remote:
remote: Create a pull request for 'generic-method' on GitHub by visiting:
remote:   https://github.com/Izzaaaaaaaaa/TPMODUL5_2311104052/pull/new/generic-method
remote:
To https://github.com/Izzaaaaaaaaa/TPMODUL5_2311104052.git
 * [new branch]      generic-method -> generic-method
branch 'generic-method' set up to track 'origin/generic-method'.

C:\Users\ASUS\source\repos\KPL_izzatyzahara_2311104052_S1SE-07-02\05_Generics\TPMODUL5_2311104052\TPModul5_2311104052>git add .

C:\Users\ASUS\source\repos\KPL_izzatyzahara_2311104052_S1SE-07-02\05_Generics\TPMODUL5_2311104052\TPModul5_2311104052>git commit -m "Menambahkan class HaloGeneric dengan method SapaUser"
[generic-method f30bf15] Menambahkan class HaloGeneric dengan method SapaUser
19 files changed, 73 insertions(+), 16 deletions(-)
delete mode 100644 HaloGeneric.cs
create mode 100644 bin/Debug/net8.0/TPModul5_2311104052.deps.json

```

```

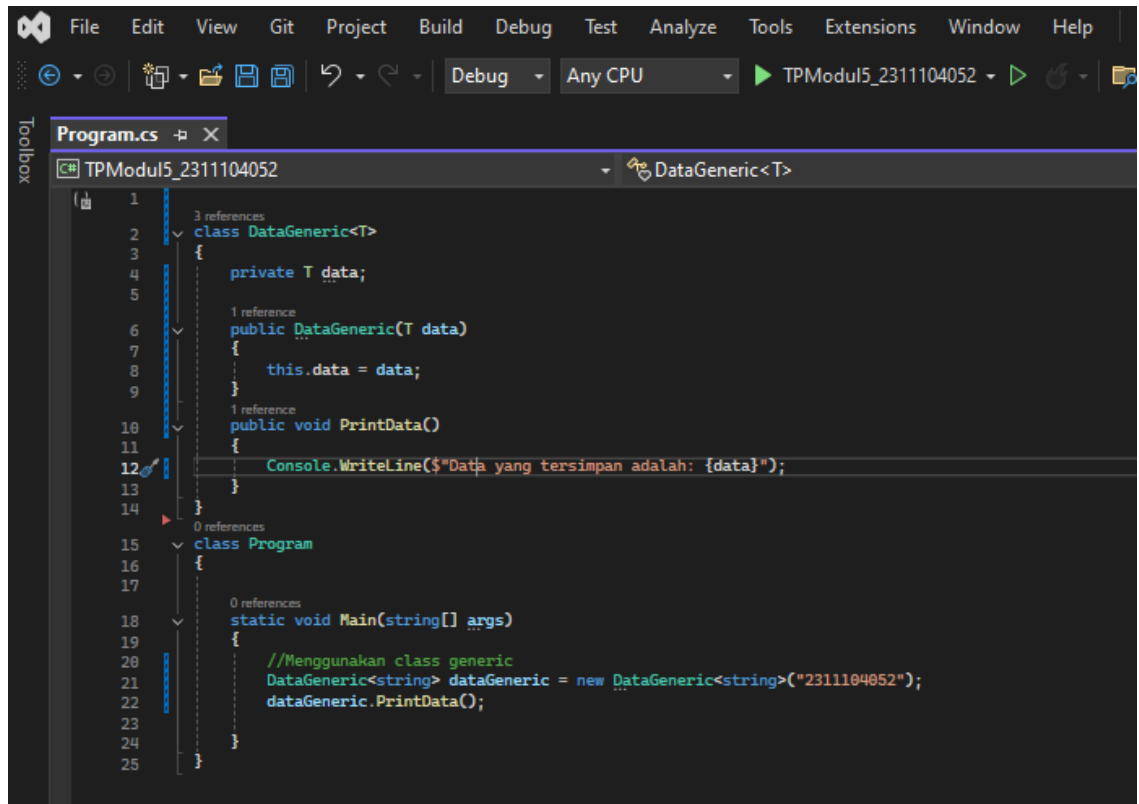
C:\Users\ASUS\source\repos\KPL_izzatyzahara_2311104052_S1SE-07-02\05_Generics\TPMODUL5_2311104052\TPModul5_2311104052>git add .

C:\Users\ASUS\source\repos\KPL_izzatyzahara_2311104052_S1SE-07-02\05_Generics\TPMODUL5_2311104052\TPModul5_2311104052>git commit -m "Menambahkan class DataGeneric"
On branch generic-class
nothing to commit, working tree clean

C:\Users\ASUS\source\repos\KPL_izzatyzahara_2311104052_S1SE-07-02\05_Generics\TPMODUL5_2311104052\TPModul5_2311104052>git push -u origin generic-class
Total 0 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
remote:
remote: Create a pull request for 'generic-class' on GitHub by visiting
remote:   https://github.com/Izzaaaaaaaaa/TPMODUL5_2311104052/pull/new/generic-class
remote:
To https://github.com/Izzaaaaaaaaa/TPMODUL5_2311104052.git
 * [new branch]      generic-class -> generic-class
branch 'generic-class' set up to track 'origin/generic-class'.

C:\Users\ASUS\source\repos\KPL_izzatyzahara_2311104052_S1SE-07-02\05_Generics\TPMODUL5_2311104052\TPModul5_2311104052>git branch
* generic-class
  generic-method
  master

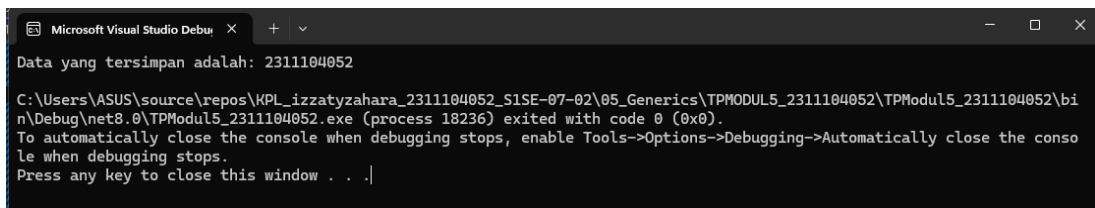
```



```

1  class DataGeneric<T>
2  {
3      private T data;
4
5      public DataGeneric(T data)
6      {
7          this.data = data;
8      }
9
10     public void PrintData()
11     {
12         Console.WriteLine($"Data yang tersimpan adalah: {data}");
13     }
14 }
15
16 class Program
17 {
18     static void Main(string[] args)
19     {
20         //Menggunakan class generic
21         DataGeneric<string> dataGeneric = new DataGeneric<string>("2311104052");
22         dataGeneric.PrintData();
23     }
24 }
25

```



```

Microsoft Visual Studio Debug
Data yang tersimpan adalah: 2311104052

C:\Users\ASUS\source\repos\KPL_izzatyzahara_2311104052_S1SE-07-02\05_Generics\TPMODUL5_2311104052\TPMODUL5_2311104052\bin\Debug\net8.0\TPMODUL5_2311104052.exe (process 18236) exited with code 0 (0x0).
To automatically close the console when debugging stops, enable Tools->Options->Debugging->Automatically close the console when debugging stops.
Press any key to close this window . . .|

```

```

C:\Users\ASUS\source\repos\KPL_izzatyzahara_2311104052_S1SE-07-02\05_Generics\TPMODUL5_2311104052>git add Program.cs
C:\Users\ASUS\source\repos\KPL_izzatyzahara_2311104052_S1SE-07-02\05_Generics\TPMODUL5_2311104052\TPMODUL5_2311104052>git commit -m "Menyelesaikan merge conflict"
[master 56dfd54] Menyelesaikan merge conflict

```

```

C:\Users\ASUS\source\repos\KPL_izzatyzahara_2311104052_S1SE-07-02\05_Generics\TPMODUL5_2311104052\TPMODUL5_2311104052>git pull origin master
From https://github.com/Izzaaaaaaaaa/TPMODUL5_2311104052
* branch      master       -> FETCH_HEAD
Merge made by the 'ort' strategy.

C:\Users\ASUS\source\repos\KPL_izzatyzahara_2311104052_S1SE-07-02\05_Generics\TPMODUL5_2311104052\TPMODUL5_2311104052>git push -u origin master
Enumerating objects: 30, done.
Counting objects: 100% (30/30), done.
Delta compression using up to 4 threads
Compressing objects: 100% (14/14), done.
Writing objects: 100% (16/16), 1.76 KiB | 1.76 MiB/s, done.
Total 16 (delta 8), reused 0 (delta 0), pack-reused 0 (from 0)
remote: Resolving deltas: 100% (8/8), completed with 5 local objects.
To https://github.com/Izzaaaaaaaaa/TPMODUL5_2311104052.git
cbe0ec9..a37d0fe  master -> master
branch 'master' set up to track 'origin/master'.

```

```
Program.cs* TPModul5_2311...oInputs.cache TPModul5_23
C# TPModul5_2311104052 DataGeneric<T>
1 class HaloGeneric
2 {
3     public static void SapaUser<T>(T user)
4     {
5         Console.WriteLine($"Halo user {user}");
6     }
7 }
8
9 class DataGeneric<T>
10 {
11     private T data;
12
13     public DataGeneric(T data)
14     {
15         this.data = data;
16     }
17     public void PrintData()
18     {
19         Console.WriteLine($"Data yang tersimpan adalah: {data}");
20     }
21 }
22 class Program
23 {
24
25     static void Main(string[] args)
26     {
27         // Memanggil method generic
28         HaloGeneric.SapaUser("Iza");
29
30         // Menggunakan class generic
31         DataGeneric<string> dataGeneric = new DataGeneric<string>("2311104052");
32         dataGeneric.PrintData();
33         Console.ReadLine();
34     }
35 }
36
```

```
C:\Users\ASUS\source/repos\ x + -
Halo user Iza
Data yang tersimpan adalah: 2311104052
```

III. Penjelasan Syntax Secara Singkat

Program ini punya tiga bagian utama: Program, HaloGeneric, dan DataGeneric<T>. Di dalam Main(), ada dua hal yang dilakukan. Pertama, program memanggil method SapaUser() dari class HaloGeneric, yang akan mencetak "Halo user Iza" ke layar. Method ini pakai generic, jadi bisa menerima jenis data apa saja. Kedua, program bikin objek dari DataGeneric<T>, lalu menyimpan NIM (2311104052) di dalamnya. Setelah itu, program akan mencetak "Data yang tersimpan adalah: 2311104052" ke layar. Tujuan utama dari program ini adalah menunjukkan bagaimana Generic bisa digunakan dalam method dan class. Dengan Generic, kita bisa bikin kode yang lebih fleksibel tanpa harus menentukan tipe data tertentu dari awal. Jadi, program ini bisa digunakan buat berbagai keperluan tanpa banyak perubahan.