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Tugas: 4 Pemrograman Lanjut

Program =While Loop 01234

```
using System;
namespace MyApplication
{
    class Program
    {
        static void Main(string[] args)
        {
            int i = 0;
            while (i < 5)
            {
                Console.WriteLine(i);
                i++;
            }
            Console.WriteLine(" sahel_230204622021");
        }
    }
}
```

```
0
1
2
3
4
sahel_230204622021

C:\Users\SahelMuawwal\source\repos\Project1HelloWorld\TugasMandiril\Projek
t1 Hello Word\ConsoleApp3\bin\Debug\net8.0\ConsoleApp3.exe (process 23460)
 exited with code 0 (0x0).
To automatically close the console when debugging stops, enable Tools->Opt
ions->Debugging->Automatically close the console when debugging stops.
Press any key to close this window . . .
```

Program = While Loop 56789

```
using System;
namespace MyApplication
{
    class Program
    {
        static void Main(string[] args)
        {
            int i = 5;
            while (i < 10)
            {
                Console.WriteLine(i);
                i++;
            }
            Console.WriteLine("sahel_230204622021");
        }
    }
}
```

```
5
6
7
8
9
sahel_230204622021

C:\Users\SahelMuawwal\source\repos\Project1HelloWorld\TugasMandiril\Projek
t1 Hello Word\ConsoleApp3\bin\Debug\net8.0\ConsoleApp3.exe (process 20008)
 exited with code 0 (0x0).
To automatically close the console when debugging stops, enable Tools->Opt
ions->Debugging->Automatically close the console when debugging stops.
Press any key to close this window . . .
```

Program = While Loop 0123456789

A screenshot of Microsoft Visual Studio showing a console application named "ConsoleApp3". The code in Program.cs is as follows:

```
1 using System;
2
3 namespace MyApplication
4 {
5     class Program
6     {
7         static void Main(string[] args)
8         {
9             int i = 0;
10            while (i < 10)
11            {
12                Console.WriteLine(i);
13                i++;
14            }
15            Console.WriteLine("sahel_230204622021");
16        }
17    }
18 }
```

The output window shows the numbers 0 through 9 printed to the console, followed by the string "sahel_230204622021". A tooltip at the bottom right of the output window says: "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 . . .".

Program = While Loop 98765

A screenshot of Microsoft Visual Studio showing a console application named "ConsoleApp3". The code in Program.cs is as follows:

```
1 using System;
2
3 public class Program
4 {
5     public static void Main()
6     {
7         int i = 9;
8         while (i >= 5)
9         {
10            Console.WriteLine(i);
11            i--;
12        }
13        // nama + NIM di bawah, setelah loop
14        Console.WriteLine("sahel_230204622021");
15        // opsional: agar jendela console tidak langsung tutup
16        Console.ReadKey();
17    }
18 }
```

The output window shows the numbers 9, 8, 7, 6, and 5 printed to the console, followed by the string "sahel_230204622021".

Program = While Loop 13579

```
1 using System;
2
3 namespace MyApplication
4 {
5     class Program
6     {
7         static void Main(string[] args)
8         {
9             int i = 1;
10            while (i <= 9)
11            {
12                Console.WriteLine(i);
13                i += 2; // This line is highlighted with a red arrow
14            }
15            Console.WriteLine("sahel_230204622021");
16        }
17    }
18 }
```

Output

```
Show output from: Debug
'ConsoleApp3.exe' (CoreCLR: clrhost): Loaded 'C:\Program Files\dotnet\shared\Microsoft
The program [23568] ConsoleApp3.exe: Program Trace' has exited with code 0 (0x0).
The program [23568] ConsoleApp3.exe' has exited with code 0 (0x0).
```

Error List Output

Ready

Program = While Loop 135Wow9111315

```
1 using System;
2
3 public class Program
4 {
5     public static void Main()
6     {
7         int i = 1;
8
9         while (i <= 15)
10        {
11            if (i == 7)
12            {
13                Console.WriteLine("Wow");
14            }
15            else
16            {
17                Console.WriteLine(i);
18            }
19            i += 2;
20        }
21
22        Console.WriteLine("sahel_230204622021");
23    }
24 }
```

Output

```
Show output from: Debug
'ConsoleApp3.exe' (CoreCLR: clrhost): Loaded 'C:\Program Files\dotnet\shared\Micro
The program [4072] ConsoleApp3.exe: Program Trace' has exited with code 0 (0x0).
The program [4072] ConsoleApp3.exe' has exited with code 0 (0x0).
```

Error List Output

Ready

Program = While Loop ciluk35791113baaa

Program.cs

```
3
4
5    class Program
6    {
7        static void Main()
8        {
9            int i = 1;
10
11            while (i <= 15)
12            {
13                if (i == 1)
14                {
15                    Console.WriteLine("ciliuk");
16                }
17                else if (i == 15)
18                {
19                    Console.WriteLine("baaaa");
20                }
21                else
22                {
23                    Console.WriteLine(i);
24                }
25                i += 2;
26            }
27
28        }
29
30        static void Main()
31        {
32            Console.WriteLine("sahel_230204622021");
33        }
34    }
35 }
```

Microsoft Visual Studio Debug

```
ciliuk
3
5
7
9
11
13
baaaa
sahel_230204622021

C:\Users\SahelMuawwal\source/repos\Project1HelloWorld\Tu
gasmandir\Project1 Hello Word\ConsoleApp3\bin\Debug\net
8.0\ConsoleApp3.exe (process 11428) exited with code 0
(0x0).

To automatically close the console when debugging stops,
enable Tools->Options->Debugging->Automatically close t
he console when debugging stops.

Press any key to close this window . . .
```

Program = For Loop 13579

File Edit View Git Project Build Debug Test Analyze Tools Extensions Window Help Search

ConsoleApp3

Program.cs x

```
ConsoleApp3
1 using System;
2
3 namespace MyApplication
4 {
5     class Program
6     {
7         static void Main(string[] args)
8         {
9             for (int i = 1; i < 10; i += 2)
10             {
11                 Console.WriteLine(i);
12             }
13
14             Console.WriteLine("sahel_230204622021");
15         }
16     }
17 }
18
```

No issues found

Output

```
Show output from: Debug
'ConsoleApp3.exe' (CoreCLR: clrhost): Loaded 'C:\Program Files\dotnet\shared\Microsoft.NET\Assemblies\2.1.0\Microsoft.CSharp.dll'.
'ConsoleApp3.exe' (CoreCLR: clrhost): Loaded 'C:\Program Files\dotnet\shared\Microsoft.NET\Assemblies\2.1.0\Microsoft.VisualBasic.dll'.
'ConsoleApp3.exe' (CoreCLR: clrhost): Loaded 'C:\Program Files\dotnet\shared\Microsoft.NET\Assemblies\2.1.0\System.Data.dll'.
'ConsoleApp3.exe' (CoreCLR: clrhost): Loaded 'C:\Program Files\dotnet\shared\Microsoft.NET\Assemblies\2.1.0\System.dll'.
The program [26396] ConsoleApp3.exe: Program Trace has exited with code 0 (0x0).
The program [26396] ConsoleApp3.exe has exited with code 0 (0x0).
```

Microsoft Visual Studio Debug

```
1
3
5
7
9
sahel_230204622021

C:\Users\SahelMuawwal\source\repos\Project1\HelloWorld\Tu
gas\andiril\Project1 Hello Word\ConsoleApp3\bin\Debug\n
e8.0\ConsoleApp3.exe (process 26396) exited with code 0
(0x0).

To automatically close the console when debugging stops,
enable Tools->Options->Debugging->Automatically close t
he console when debugging stops.

Press any key to close this window . . .
```

Solution Explorer

Search Solution Explorer (Ctrl+F)

Solution ConsoleApp3 (1 of 1 project)

ConsoleApp3

Dependencies

Program.cs

Ready

Program = For Loop Hidup 3x Mahasiswa 2x

The screenshot shows the Microsoft Visual Studio interface with the following details:

- Solution Explorer:** Shows a single project named "ConsoleApp3".
- Code Editor:** Displays the "Program.cs" file with the following C# code:

```
using System;
namespace MyApplication
{
    class Program
    {
        static void Main(string[] args)
        {
            for (int i = 1; i <= 3; i++)
            {
                Console.WriteLine("Hidup");
            }

            for (int j = 1; j <= 2; j++)
            {
                Console.WriteLine("Mahasiswa");
            }

            Console.WriteLine("sahel_230204622021");
        }
    }
}
```
- Output Window:** Shows the console output from the debugger:

```
Hidup
Hidup
Hidup
Mahasiswa
Mahasiswa
sahel_230204622021
```

C:\Users\SahelMuawwal\source\repos\Project1HelloWorld\tugasMandiri1\Project1 Hello Word\ConsoleApp3\bin\Debug\net8.0\ConsoleApp3.exe (process 18260) 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 . . .

Program = For Loop Hidup 3x Mahasiswa 2x

The screenshot shows the Microsoft Visual Studio interface with the following details:

- Solution Explorer:** Shows a single project named "ConsoleApp3".
- Code Editor:** Displays the "Program.cs" file with the following C# code:

```
using System;
namespace MyApplication
{
    class Program
    {
        static void Main(string[] args)
        {
            for (int i = 1; i <= 5; i++)
            {
                if (i <= 3)
                {
                    Console.WriteLine("Hidup");
                }
                else
                {
                    Console.WriteLine("Mahasiswa");
                }
            }

            Console.WriteLine("sahel_230204622021");
        }
    }
}
```
- Output Window:** Shows the console output from the debugger:

```
Hidup
Hidup
Hidup
Mahasiswa
Mahasiswa
sahel_230204622021

C:\Users\SahelMuawwal\source\repos\Project1HelloWorld\tugasMandiri1\Project1 Hello Word\ConsoleApp3\bin\Debug\net8.0\ConsoleApp3.exe (process 428) 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 . . .
```

Program = Array Daeng, Deng Tata

```
using System;
namespace MyApplication
{
    public class Program
    {
        public static void Main(string[] args)
        {
            int[] angka = { 5, 10, 12, 7, 9 };
            string[] nama = { "Nabilah", "Habibie", "Ivan", "Daeng" };

            Console.WriteLine(nama[3]);
            nama[3] = "Daeng Tata";
            Console.WriteLine(nama[3]);
            Console.WriteLine("sahel_230204622021");
        }
    }
}
```

Microsoft Visual Studio Debug Output window:

```
Daeng
Daeng Tata
sahel_230204622021

C:\Users\SahelMuawwal\source\repos\Project1HelloWorld\Tu
gasMandiril1\Project1 Hello Word\ConsoleApp3\bin\Debug\n
t8.0\ConsoleApp3.exe (process 1484) exited with code 0 (0x0).
To automatically close the console when debugging stops,
enable Tools->Options->Debugging->Automatically close t
he console when debugging stops.
Press any key to close this window . . .
```

Output window:

```
Show output from: Debug
'ConsoleApp3.exe' (CoreCLR: clrhost): Loaded 'C:\Program Files\dotnet\shared\Microsoft.NETCore.App\8.0.1'.
The program '[1484] ConsoleApp3.exe: Program Trace' has exited with code 0 (0x0).
The program '[1484] ConsoleApp3.exe' has exited with code 0 (0x0).
```

Program = Foreach Loop Nama dan Gelar

```
using System;
namespace MyApplication
{
    public class Program
    {
        public static void Main(string[] args)
        {
            string[] nama = { "Nabilah", "Habibie", "Ivan", "Daeng", "Asep", "Anto" };
            foreach (string nama_mahasiswa in nama)
            {
                Console.WriteLine(nama_mahasiswa + " S.T.T.");
            }
            Console.WriteLine("sahel_230204622021");
        }
    }
}
```

Microsoft Visual Studio Debug Output window:

```
Nabilah, S.T.T.
Habibie, S.T.T.
Ivan, S.T.T.
Daeng, S.T.T.
Asep, S.T.T.
Anto, S.T.T.
sahel_230204622021

C:\Users\SahelMuawwal\source\repos\Project1HelloWorld\Tu
gasMandiril1\Project1 Hello Word\ConsoleApp3\bin\Debug\n
t8.0\ConsoleApp3.exe (process 14352) exited with code 0 (0x0).
To automatically close the console when debugging stops,
enable Tools->Options->Debugging->Automatically close t
he console when debugging stops.
Press any key to close this window . . .
```

Output window:

```
Show output from: Debug
'ConsoleApp3.exe' (CoreCLR: clrhost): Loaded 'C:\Program Files\dotnet\shared\Microsoft.NETCore.App\8.0.19\System.Security.C
'ConsoleApp3.exe' (CoreCLR: clrhost): Loaded 'C:\Program Files\dotnet\shared\Microsoft.NETCore.App\8.0.19\System.Runtime.Lo
'ConsoleApp3.exe' (CoreCLR: clrhost): Loaded 'C:\Program Files\dotnet\shared\Microsoft.NETCore.App\8.0.19\System.Text.Encod
'ConsoleApp3.exe' (CoreCLR: clrhost): Loaded 'C:\Program Files\dotnet\shared\Microsoft.NETCore.App\8.0.19\System.Collections
The program '[14352] ConsoleApp3.exe: Program Trace' has exited with code 0 (0x0).
The program '[14352] ConsoleApp3.exe' has exited with code 0 (0x0).
```

Program = Foreach Loop Nama dan Gelar.

```
1 using System;
2
3 namespace MyApplication
4 {
5     public class Program
6     {
7         public static void Main(string[] args)
8         {
9             string[] nama = { "Nabilah", "Habibie", "Ivan", "Daeng", "Asep", "Anto" };
10            for (int i = 0; i < nama.Length; i++)
11            {
12                Console.WriteLine(nama[i] + ", S.T.T.");
13            }
14
15            foreach (string nama_mahasiswa in nama)
16            {
17                Console.WriteLine(nama_mahasiswa + ", S.T.T.");
18            }
19            Console.WriteLine("muhammad sahel muawwal_230204622021");
20        }
21    }
22 }
```

Output

```
Show output from: Debug
'ConsoleApp3.exe' [CoreCLR: clrhost]: Loaded 'C:\Program Files\dotnet\shared\Microsoft.NETCore.App\8.0.19\System.Security.Claims.dll'
'ConsoleApp3.exe' [CoreCLR: clrhost]: Loaded 'C:\Program Files\dotnet\shared\Microsoft.NETCore.App\8.0.19\System.Runtime.dll'
'ConsoleApp3.exe' [CoreCLR: clrhost]: Loaded 'C:\Program Files\dotnet\shared\Microsoft.NETCore.App\8.0.19\System.Text.Encoding.dll'
'ConsoleApp3.exe' [CoreCLR: clrhost]: Loaded 'C:\Program Files\dotnet\shared\Microsoft.NETCore.App\8.0.19\System.Collections.dll'
The program '[23388] ConsoleApp3.exe' has exited with code 0 (0x0).
The program '[23388] ConsoleApp3.exe' has exited with code 0 (0x0).
```

Solution Explorer

Console App3 (1 of 1 project)

Dependencies

Program.cs

GitHub Copilot

Microsoft Visual Studio Debug

Output

Ready