LAPORAN TUGAS PERTEMUAN 8

PEMROGRAMAN

Nama :	Muhammad Willie Prakasa
NIM :	22.11.4841
Dosen Pengampu :	Abd. Mizwar A. Rahim, M.Kom
Asisten Dosen Koordinator :	Dimas Ariyanto
Tanggal Pengumpulan :	10 Juli 2023

S1-INFORMATIKA UNIVERSITAS AMIKOM YOGYAKARTA

2023

1. Program

```csharp
using System;
namespace pertemuan10
{
    public class PrinterWindows
    {
        public string name { get; set; }
        public string dimention { get; set; }

        public PrinterWindows(string name, string dimention)
        {
            this.name = name;
            this.dimention = dimention;
        }

        public virtual void show()
        {
            Console.WriteLine("{0} display dimention : {1}", this.name, this.dimention);
        }

        public virtual void print()
        {
            Console.WriteLine("{0} printer printing....", this.name);
        }

    }


    public class Epson : PrinterWindows
    {
        public Epson(string name, string dimention) : base(name, dimention)
        {
            this.name = name;
            this.dimention = dimention;
        }

        public override void show()
        {
            Console.WriteLine("{0} display dimention : {1}", this.name, this.dimention);
        }

        public override void print()
        {
            Console.WriteLine("{0} printer printing....", this.name);
        }

    }


    public class Canon : PrinterWindows
    {
        public Canon(string name, string dimention) : base(name, dimention)
        {
            this.name = name;
            this.dimention = dimention;
        }

        public override void show()
        {
            Console.WriteLine("{0} display dimention : {1}", this.name, this.dimention);
        }

        public override void print()
        {
            Console.WriteLine("{0} printer printing....", this.name);
        }

    }


    public class Lasetjet : PrinterWindows
    {
        public Lasetjet(string name, string dimention) : base(name, dimention)
        {
            this.name = name;
            this.dimention = dimention;
        }

        public override void show()
        {
            Console.WriteLine("{0} display dimention : {1}", this.name, this.dimention);
        }

        public override void print()
        {
            Console.WriteLine("{0} printer printing....", this.name);
        }

    }
}
```

Membuat kelas yang bernama parent class yang bernama PrinterWindows yang mempunyai 3 child class, yaitu Epson, Canon, dan LasetJet, 3 child tersebut mengoverride method yang ada di parent class.

```
1    using pertemuan10;
2
3    internal class Program
4    {
5        private static void Main(string[] args)
6        {
7            Console.WriteLine("Pilih Printer");
8            Console.WriteLine("===============");
9            Console.WriteLine("1. Epson");
10           Console.WriteLine("2. Canon");
11           Console.WriteLine("3. LaserJet");
12
13           Console.Write("Nomor Printer [1..3] : ");
14           int nomorPrinter = Convert.ToInt32(Console.ReadLine());
15
16           PrinterWindows printerWindows = new PrinterWindows("cbdcbdj", "1100");
17           if (nomorPrinter == 1)
18           {
19               printerWindows = new Epson("Epson", "11*12");
20               printerWindows.show();
21               printerWindows.print();
22
23           }
24
25           else if (nomorPrinter == 2)
26           {
27               printerWindows = new Canon("Canon", "10*11");
28               printerWindows.show();
29               printerWindows.print();
30           }
31
32           else if (nomorPrinter == 3)
33           {
34               printerWindows = new Canon("LaserJet", "9*10");
35               printerWindows.show();
36               printerWindows.print();
37           }
38
39           Console.ReadLine();
40       }
41   }
```

Kemudian pada class program dibuatlah object PrinterWindows, dan dilanjut pembuatan polymorphism untuk object kelas Epson, Canon, dan LasetJet.

Polymorphism dalam C++ adalah kemampuan objek untuk memiliki banyak bentuk atau perilaku yang berbeda. Dalam pemrograman, ini berarti bahwa objek dapat digunakan dengan cara yang sama, meskipun mereka memiliki tipe yang berbeda.

Output :

```
Pilih Printer
===============
1. Epson
2. Canon
3. LaserJet
Nomor Printer [1..3] : 1
Epson display dimention : 11*12
Epson printer printing....
```