```
Mainform Code: where you put the print button
using System;
using System. Collections. Generic;
using System.ComponentModel;
using System. Data;
using System. Drawing;
using System. Linq;
using System. Text;
using System. Windows. Forms;
namespace Project4
    public partial class Form1 : Form
        public Form1()
            InitializeComponent();
        }
        //Print W-2 Report Button click
        private void w2ToolStripMenuItem_Click(object sender, EventArgs e)
            /*I assume we've already know name, wagesDecimal, socialSecurityTaxDecimal,
            fedIncomeTaxDecimal, stateIncomeTaxDecimal, those are what we need to put in
             a W-2 form. (all of them are total amount of a year)
             you can pull out them of database or wherever you want after caculating
             and then put them in the braces in this order
            for example, name: Joe
             wagesDecimal: 20000.0,
             socialSecurityTaxDecimal:380.0,
            fedIncomeTaxDecimal: 120.0, stateIncomeTaxDecimal: 50.0
            What I gonna do is to print a W-2 form by using a derived W_2 class*/
            W 2Report aW 2 = new W 2Report ("Joe", 20000.0m, 380.0m, 120.0m, 50.0m);
//Create a parent class at first, the name is Report
using System;
using System. Collections. Generic;
using System. Ling:
using System Text;
using System. Windows. Forms;
namespace Project4
```

```
{
   class Report
        protected string nameString;
        protected decimal wagesDecimal, socialSecurityTaxDecimal, fedIncomeTaxDecimal,
stateIncomeTaxDecimal;
        public string Name
            get
               return nameString;
            set
                nameString = value;
        public decimal Wages
            get
               return wagesDecimal;
            set
                wagesDecimal = value;
            }
        public decimal SocialSecurityTax
            get
                return socialSecurityTaxDecimal;
            set
                socialSecurityTaxDecimal = value;
```

```
public decimal FedIncomeTax
           get
               return fedIncomeTaxDecimal;
           set
               fedIncomeTaxDecimal = value;
       }
       public decimal StateIncomeTax
           get
               return stateIncomeTaxDecimal;
           set
               stateIncomeTaxDecimal = value;
       public
                  Report(string nameString, decimal
                                                              wagesDecimal,
                                                                              decimal
socialSecurityTaxDecimal,
            decimal fedIncomeTaxDecimal, decimal stateIncomeTaxDecimal)
           Name = nameString;
            Wages = wagesDecimal;
           SocialSecurityTax = socialSecurityTaxDecimal;
           FedIncomeTax = fedIncomeTaxDecimal;
           StateIncomeTax = stateIncomeTaxDecimal;
           printReport();
       public virtual void printReport()
```

}

```
}
//Create a W-2 derived class, named W_2Report
using System;
using System. Collections. Generic;
using System. Linq;
using System. Text;
using System. Drawing;
using System. Drawing. Printing;
using System. Windows. Forms;
using System. ComponentModel;
namespace Project4
    class W_2Report:Report
        public
                  W_2Report(string nameString,
                                                                                  decimal
                                                   decimal
                                                                 wagesDecimal,
socialSecurityTaxDecimal,
            decimal fedIncomeTaxDecimal, decimal stateIncomeTaxDecimal)
            base (nameString, wagesDecimal, socialSecurityTaxDecimal,
            fedIncomeTaxDecimal, stateIncomeTaxDecimal)
        public override void printReport()
            PrintPreviewDialog PrintPreviewDialog1 = new PrintPreviewDialog();
            PaperSize paperSize = new PaperSize("DataOrder", 810, 470);
            PrintDocument Report = new PrintDocument();
            Report. DefaultPageSettings. PaperSize = paperSize;
            PrintPreviewDialog1.Document = Report;
            Report.PrintPage += new PrintPageEventHandler(Report PrintPage);
            PrintPreviewDialog1.FormBorderStyle = FormBorderStyle.Fixed3D;
            PrintPreviewDialog1. ShowDialog();
        public
                                      void
                                                                  Report_PrintPage(object
sender, System. Drawing. Printing. PrintPageEventArgs e)
        {
            //draw a form
```

```
float verPosFoat = 15.0f;
            float leftbianJu = 15;
            float topbianJu = 15;
            float tableWidth = 780;
            float tableHeight = 393;
            Pen line = new Pen(Color Black, 1.0f);
            Pen wideLine = new Pen(Color. Black, 2.0f);
            //Draw a Rectangle, the frame of the form
            e. Graphics. DrawRectangle(wideLine, leftbianJu, topbianJu,
                                                                              tableWidth,
tableHeight);
            //Draw horizontal lines inside the table
            e. Graphics. DrawLine (line, leftbianJu, topbianJu + 30, leftbianJu + tableWidth,
topbianJu + 30);
            e. Graphics. DrawLine (line, leftbian Ju, topbian Ju + 60, leftbian Ju + table Width,
topbianJu + 60);
            e. Graphics. DrawLine (line, leftbianJu, topbianJu + 150, leftbianJu + table Width,
topbianJu + 150);
            e. Graphics. DrawLine (line, leftbianJu, topbianJu + 180, leftbianJu + tableWidth,
topbianJu + 180);
            e. Graphics. DrawLine (line, leftbianJu, topbianJu + 320, leftbianJu + tableWidth,
topbianJu + 320);
            e. Graphics. DrawLine (line, leftbianJu + 400, topbianJu + 90, leftbianJu +
tableWidth, topbianJu + 90);
            e. Graphics. DrawLine(line, leftbianJu + 400, topbianJu + 120, leftbianJu +
tableWidth, topbianJu + 120);
            e.Graphics.DrawLine(line, leftbianJu + 400, topbianJu + 210, leftbianJu +
tableWidth, topbianJu + 210);
            e. Graphics. DrawLine (line, leftbianJu + 400, topbianJu + 240, leftbianJu +
tableWidth, topbianJu + 240);
            //Draw vertical lines inside the table
            e. Graphics. DrawLine (line, leftbianJu + 140, topbianJu, leftbianJu + 140,
topbianJu + 30);
            e. Graphics. DrawLine (line, leftbianJu + 280, topbianJu, leftbianJu + 280,
topbianJu + 30);
            e. Graphics. DrawLine (line, leftbianJu + 400, topbianJu + 30, leftbianJu + 400,
```

float hozPosFloat = 15.0f;

```
topbianJu + 320);
            e. Graphics. DrawLine (line, leftbianJu + 590, topbianJu + 30, leftbianJu + 590,
topbianJu + 320);
            e. Graphics. DrawLine (line, leftbianJu + 210, topbianJu + 320, leftbianJu + 210,
topbianJu + tableHeight);
            e. Graphics. DrawLine (line, leftbianJu + 320, topbianJu + 320, leftbianJu + 320,
topbianJu + tableHeight);
            e. Graphics. DrawLine (line, leftbianJu + 430, topbianJu + 320, leftbianJu + 430,
topbianJu + tableHeight);
            //W-2, 2013
            e. Graphics. DrawString ("Form", new Font ("Microsoft YaHei", 6, FontStyle. Bold),
            Brushes.Black, hozPosFloat, verPosFoat + 414);
            e. Graphics. DrawString ("
                                              W-2", new Font("Microsoft YaHei",
FontStyle. Bold),
            Brushes. Black, hozPosFloat, verPosFoat + 400);
            e. Graphics. DrawString ("2013", new Font ("Kozuka Mincho Pro B",
                                                                                      15,
FontStyle. Bold),
            Brushes. Black, hozPosFloat + 350, verPosFoat + 400);
            e. Graphics. DrawString ("Department of the Treasury", new Font ("Arial", 9,
FontStyle. Regular),
            Brushes. Black, hozPosFloat + 600, verPosFoat + 400);
            //Fill the form with instructions
            e. Graphics. DrawString ("
                                        Control
                                                   number",
                                                                      Font ("Arial",
FontStyle. Regular),
            Brushes. Black, hozPosFloat, verPosFoat + 1);
            e. Graphics. DrawString ("Employer identification Number", new Font ("Arial", 7,
FontStyle. Regular),
            Brushes.Black, hozPosFloat, verPosFoat + 31);
            e. Graphics. DrawString ("Employer's name, address and ZIP code", new
Font ("Arial", 7, FontStyle. Regular),
            Brushes.Black, hozPosFloat, verPosFoat + 61);
            e. Graphics. DrawString ("Employee's social security number", new Font ("Arial",
7, FontStyle. Regular),
            Brushes. Black, hozPosFloat, verPosFoat + 151);
            e. Graphics. DrawString ("
                                       Employee's
                                                      name",
                                                                     Font("Arial",
                                                                                        7.
                                                                new
FontStyle. Regular),
            Brushes. Black, hozPosFloat, verPosFoat + 181);
            e. Graphics. DrawString ("Wages, tips, other compensation \t\tFederal income tax
withheld", new Font ("Arial", 7, FontStyle. Regular),
            Brushes.Black, hozPosFloat + 400, verPosFoat + 31);
            e. Graphics. DrawString(" Social security wages\t\t\tSocial secutiry tax
withheld", new Font ("Arial", 7, FontStyle. Regular),
```

```
Brushes.Black, hozPosFloat + 400, verPosFoat + 61);
            e. Graphics. DrawString ("Medicare wages and tips\t\t\tMedicare tax withheld",
new Font("Arial", 7, FontStyle.Regular),
            Brushes. Black, hozPosFloat + 400, verPosFoat + 91);
            e. Graphics. DrawString (" Social security tips\t\t\tAllocated tips", new
Font ("Arial", 7, FontStyle. Regular),
            Brushes. Black, hozPosFloat + 400, verPosFoat + 121);
            e. Graphics. DrawString ("State Employer's state ID number\t
                                                                                    State
            State income tax", new Font ("Arial", 7, FontStyle. Regular),
wages\t\t
            Brushes.Black, hozPosFloat, verPosFoat + 321);
            //Fill the blank with data
            e. Graphics. DrawString (Name, new Font ("Arial", 10, FontStyle. Bold),
            Brushes. Black, hozPosFloat + 10, verPosFoat + 201);
            e. Graphics. DrawString (Wages. ToString() + "\n\n" + Wages. ToString() + "\n\n" +
Wages. ToString(),
                new Font("Arial", 9, FontStyle.Bold), Brushes.Black, hozPosFloat + 520,
verPosFoat + 44);
            e. Graphics. DrawString (FedIncomeTax. ToString ()
                                                                           "\n\n"
SocialSecurityTax. ToString(),
                new Font("Arial", 9, FontStyle.Bold), Brushes.Black, hozPosFloat + 720,
verPosFoat + 44);
            e. Graphics. DrawString (Wages. ToString() + "\t\t
StateIncomeTax. ToString(),
                new Font ("Arial", 9, FontStyle. Bold), Brushes. Black, hozPosFloat + 250,
verPosFoat + 335);
```