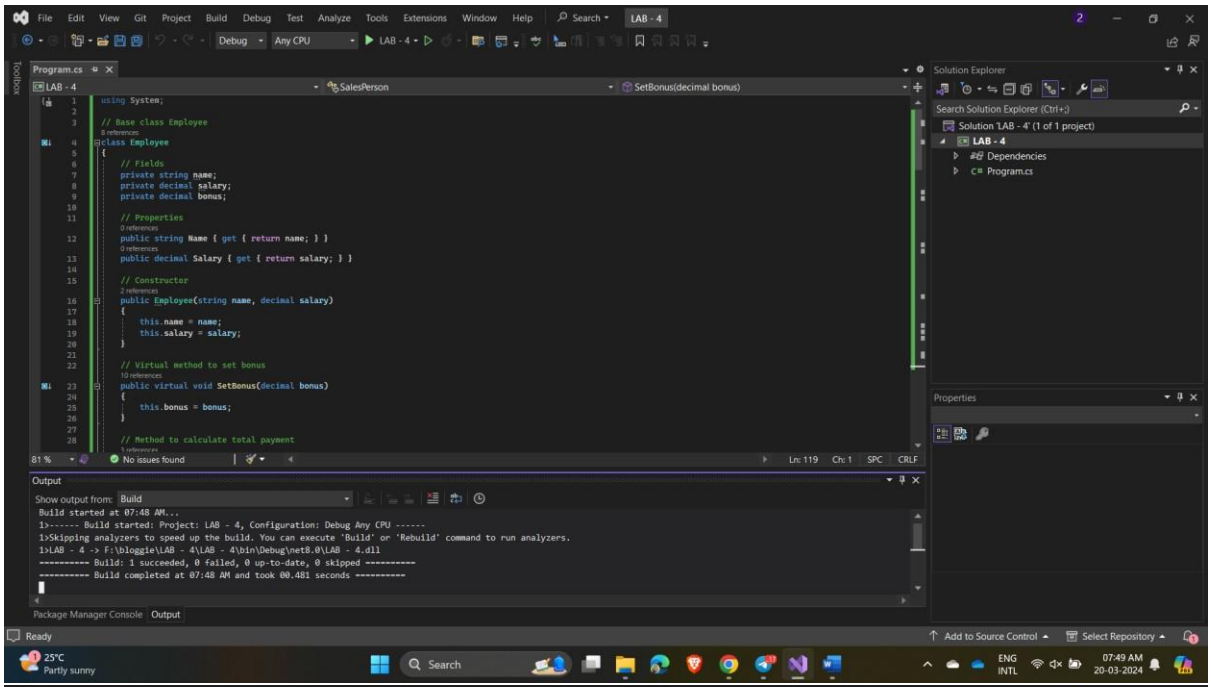
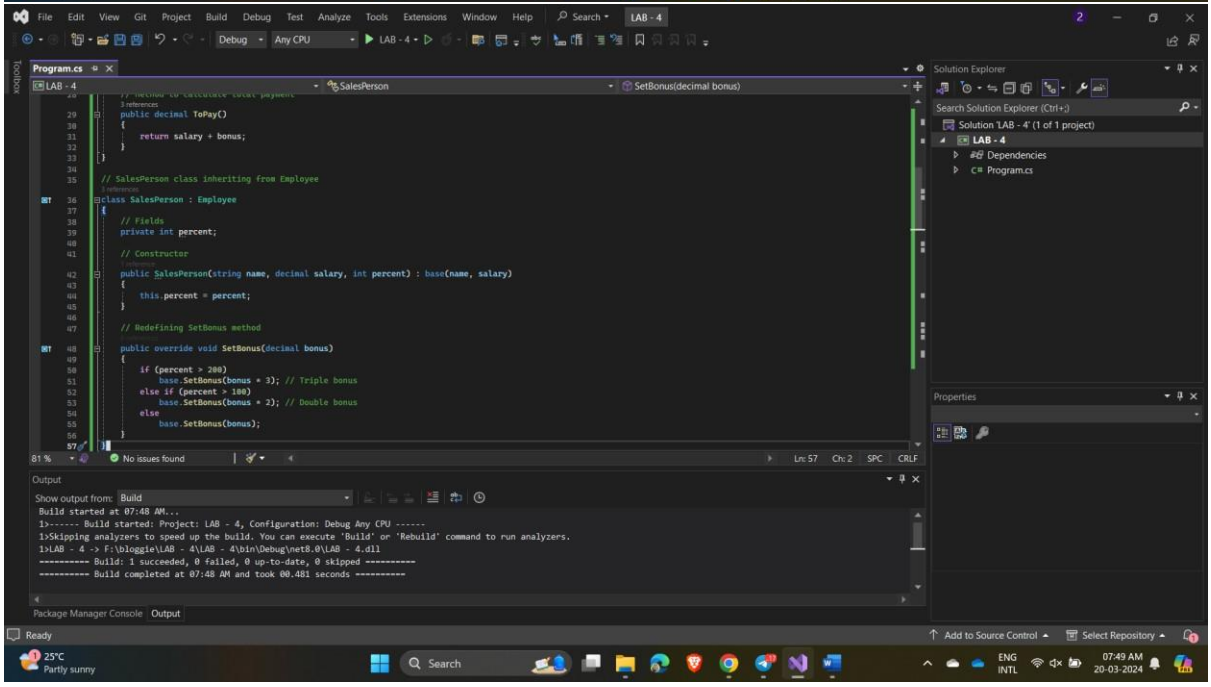
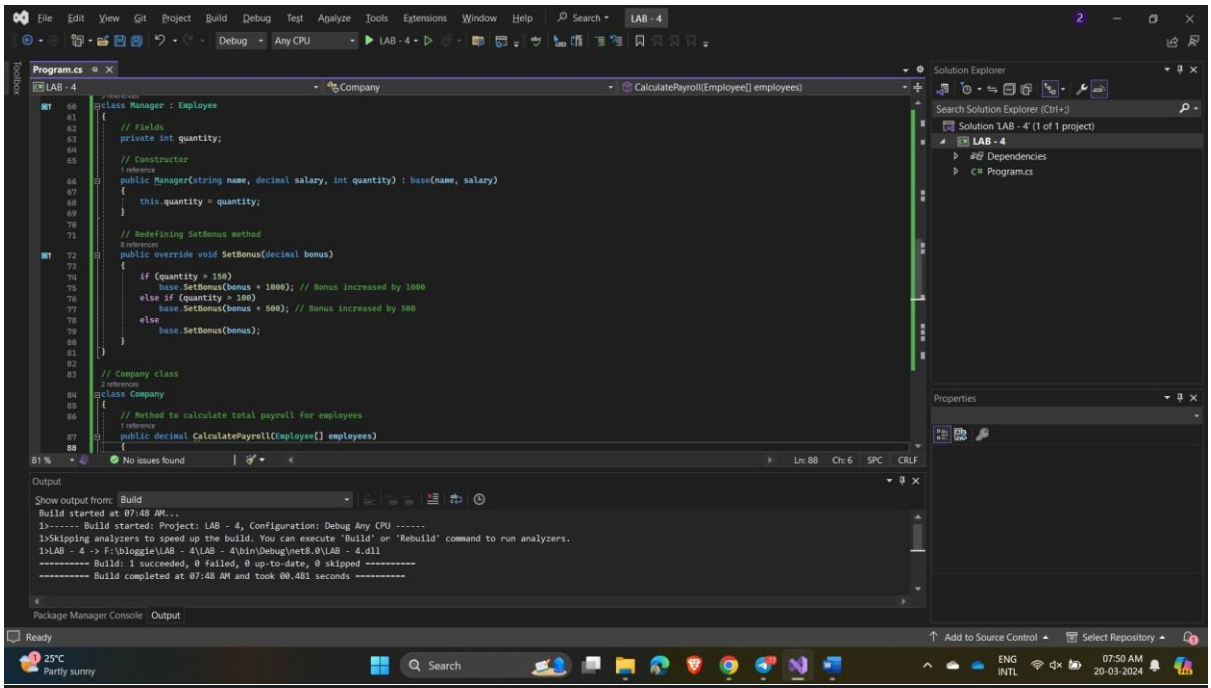
2100030522

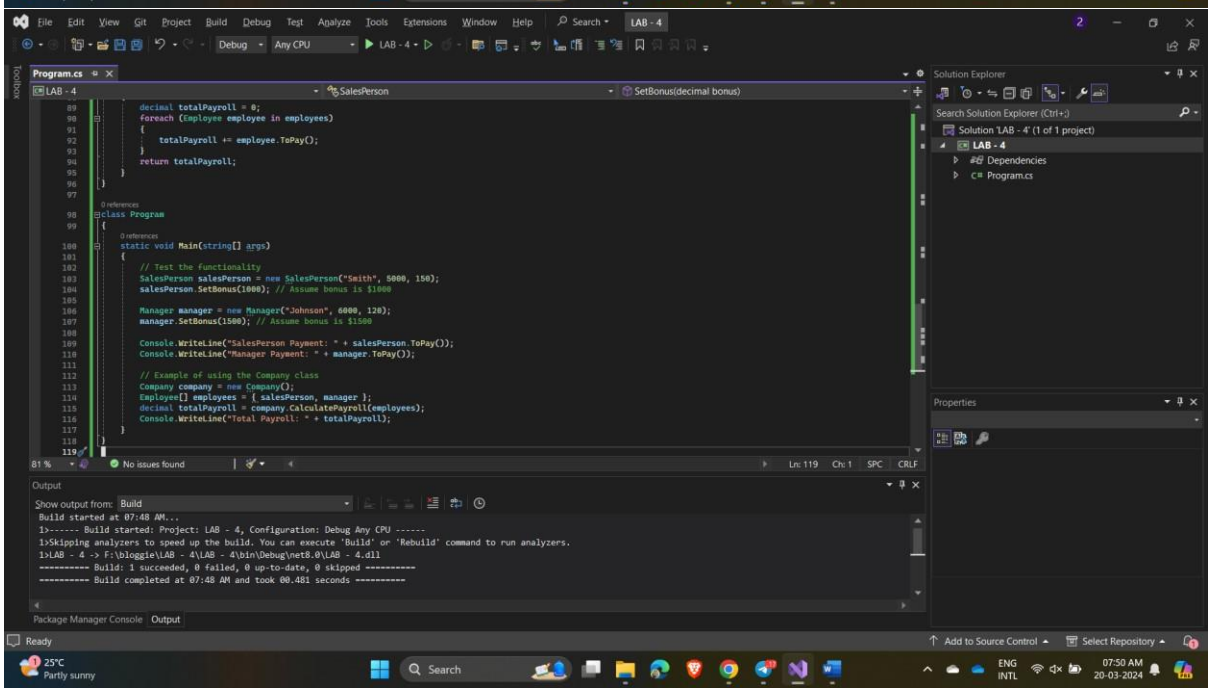
Syed Hasif Alisha

LAB 4.1

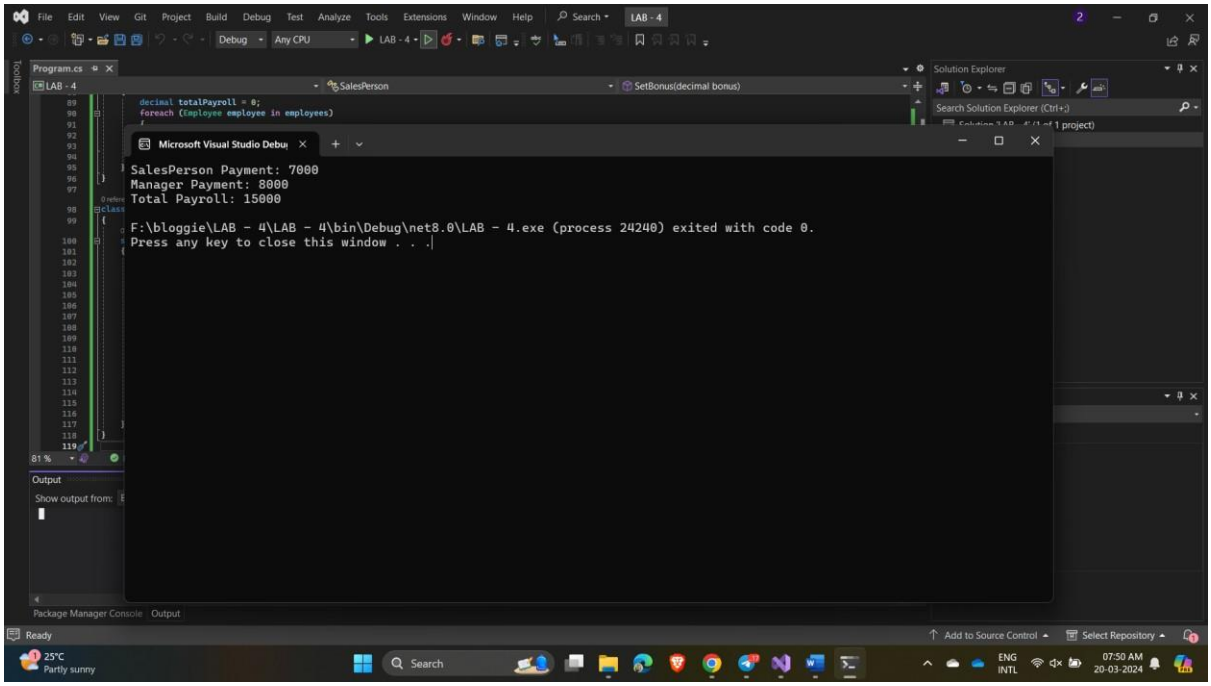


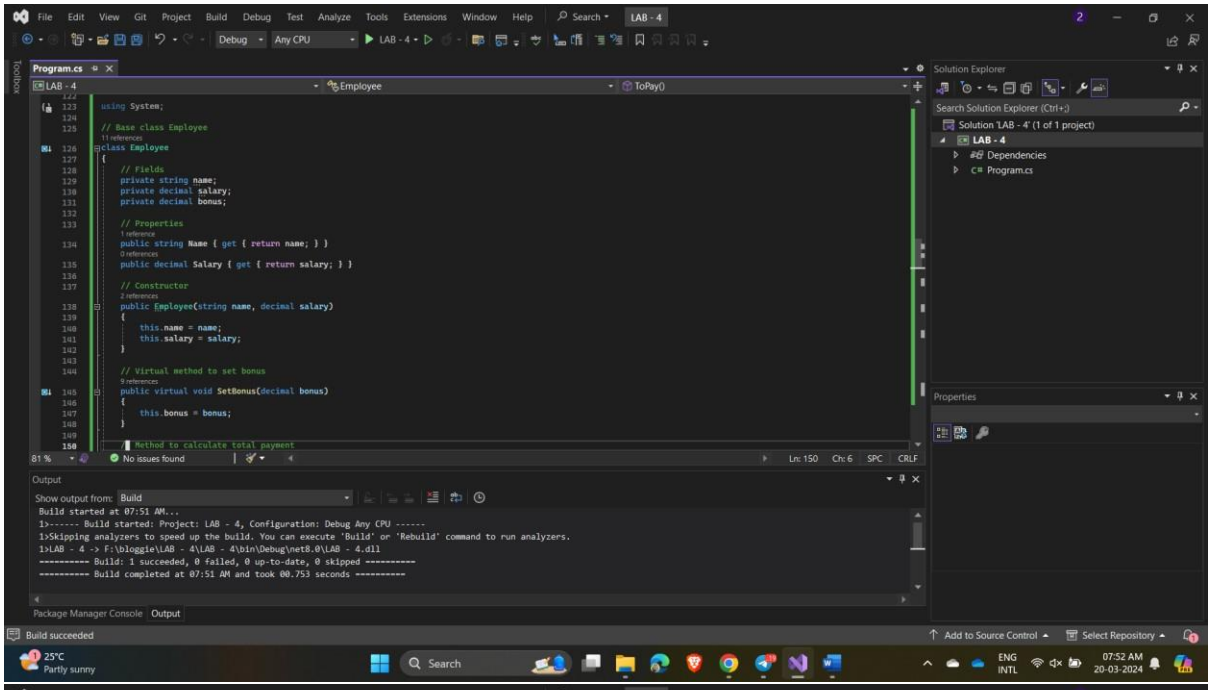


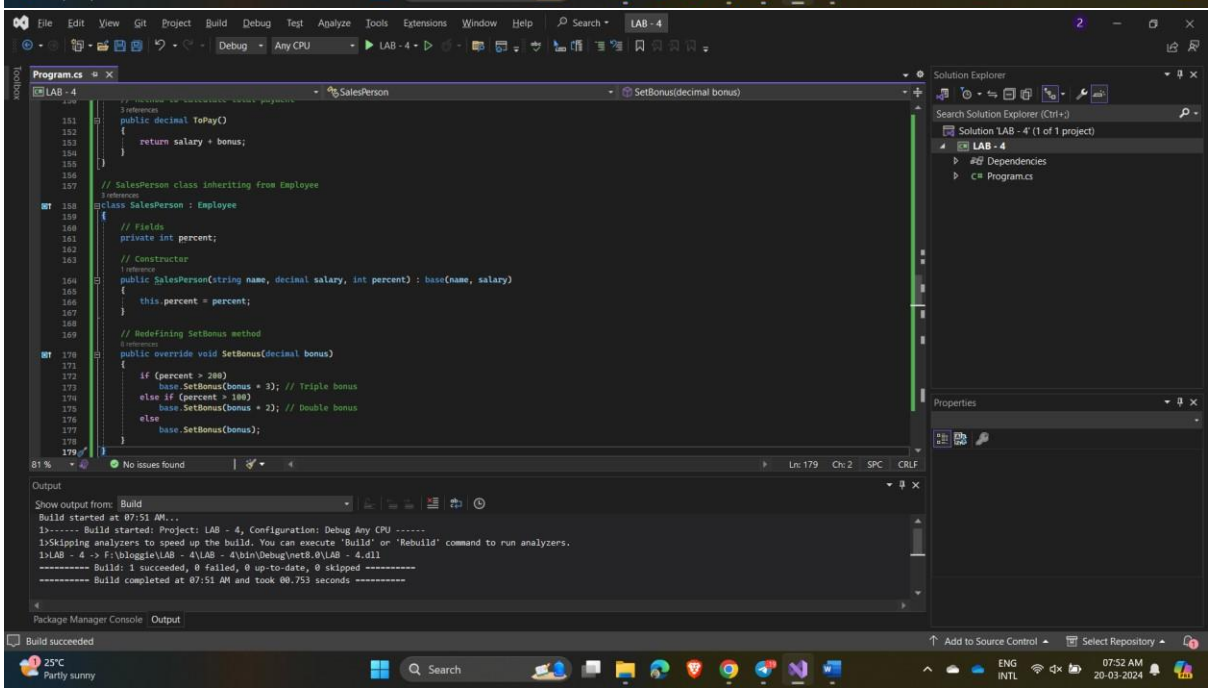

File Edit View Git Project Build Debug Test Analyze Tools Extensions Window Help
Search
LAB - 4
Debug
Any CPU
Program.cs
LAB - 4
Company
CalculatePayroll(Employee[] employees)
class Manager : Employee
{
// Fields
private int quantity;
// Constructor
public Manager(string name, decimal salary, int quantity) : base(name, salary)
{
this.quantity = quantity;
}
// Redefining SetBonus method
public override void SetBonus(decimal bonus)
{
if (quantity > 150)
base.SetBonus(bonus + 1000); // Bonus increased by 1000
else if (quantity > 100)
base.SetBonus(bonus + 500); // Bonus increased by 500
else
base.SetBonus(bonus);
}
}
// Company class
class Company
{
// Method to calculate total payroll for employees
public decimal CalculatePayroll(Employee[] employees)
{
No issues found
Ln: 88 Ch: 6 SPC CRLF
Solution Explorer
Search Solution Explorer (Ctrl+;)
Solution 'LAB - 4' (1 of 1 project)
LAB - 4
Dependencies
Program.cs
Properties
Output
Show output from: Build
Build started at 07:48 AM...
1>------ Build started: Project: LAB - 4, Configuration: Debug Any CPU ------
1>Skipping analyzers to speed up the build. You can execute 'Build' or 'Rebuild' command to run analyzers.
1>LAB - 4 -> F:\bloggie\LAB - 4\LAB - 4\bin\Debug\net8.0\LAB - 4.dll
========== Build: 1 succeeded, 0 failed, 0 up-to-date, 0 skipped ==========
========== Build completed at 07:48 AM and took 00.481 seconds ==========
Package Manager Console
Output
Ready
Add to Source Control
Select Repository
25°C
Partly sunny
Search
ENG
INTL
07:50 AM
20-03-2024

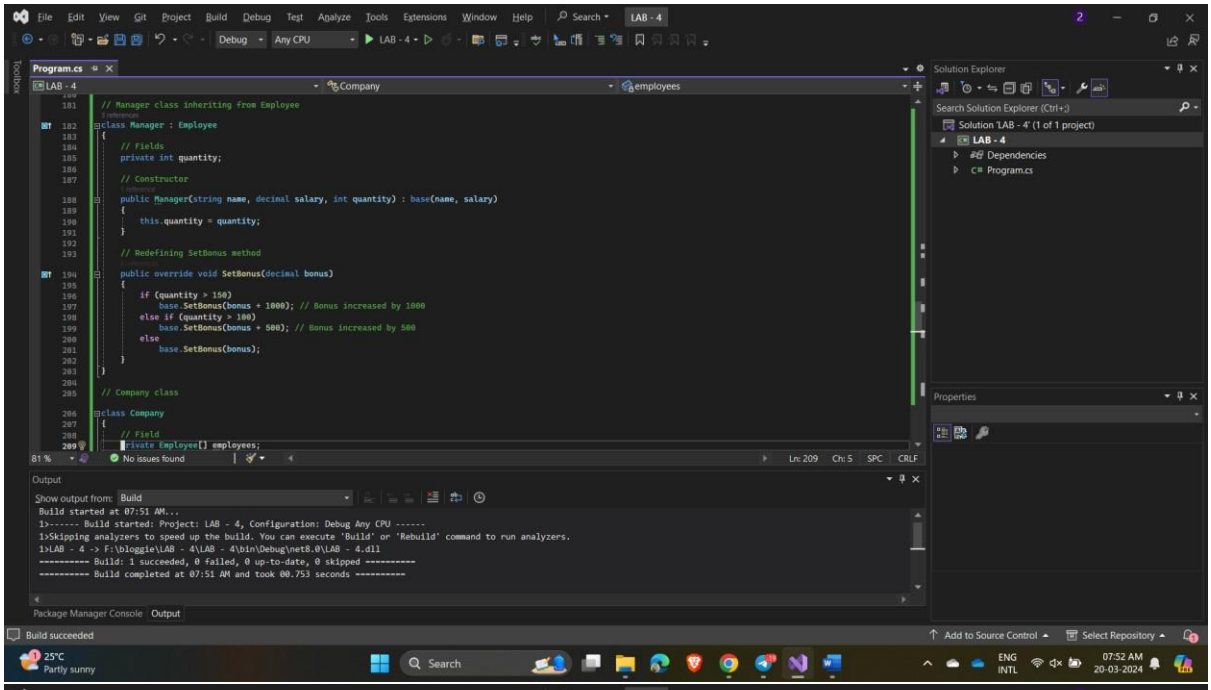

File Edit View Git Project Build Debug Test Analyze Tools Extensions Window Help
Search
LAB - 4
Debug
Any CPU
Program.cs
LAB - 4
SalesPerson
SetBonus(decimal bonus)
decimal totalPayroll = 0;
foreach (Employee employee in employees)
{
totalPayroll += employee.ToPay();
}
return totalPayroll;
}
}
class Program
{
static void Main(string[] args)
{
// Test the functionality
SalesPerson salesPerson = new SalesPerson("Smith", 5000, 150);
salesPerson.SetBonus(1000); // Assume bonus is $1000
Manager manager = new Manager("Johnson", 6000, 120);
manager.SetBonus(1500); // Assume bonus is $1500
Console.WriteLine("SalesPerson Payment: " + salesPerson.ToPay());
Console.WriteLine("Manager Payment: " + manager.ToPay());
// Example of using the Company class
Company company = new Company();
Employee[] employees = { salesPerson, manager };
decimal totalPayroll = company.CalculatePayroll(employees);
Console.WriteLine("Total Payroll: " + totalPayroll);
}
}
No issues found
Ln: 119 Ch: 1 SPC CRLF
Solution Explorer
Search Solution Explorer (Ctrl+;)
Solution 'LAB - 4' (1 of 1 project)
LAB - 4
Dependencies
Program.cs
Properties
Output
Show output from: Build
Build started at 07:48 AM...
1>------ Build started: Project: LAB - 4, Configuration: Debug Any CPU ------
1>Skipping analyzers to speed up the build. You can execute 'Build' or 'Rebuild' command to run analyzers.
1>LAB - 4 -> F:\bloggie\LAB - 4\LAB - 4\bin\Debug\net8.0\LAB - 4.dll
========== Build: 1 succeeded, 0 failed, 0 up-to-date, 0 skipped ==========
========== Build completed at 07:48 AM and took 00.481 seconds ==========
Package Manager Console
Output
Ready
Add to Source Control
Select Repository
25°C
Partly sunny
Search
ENG
INTL
07:50 AM
20-03-2024

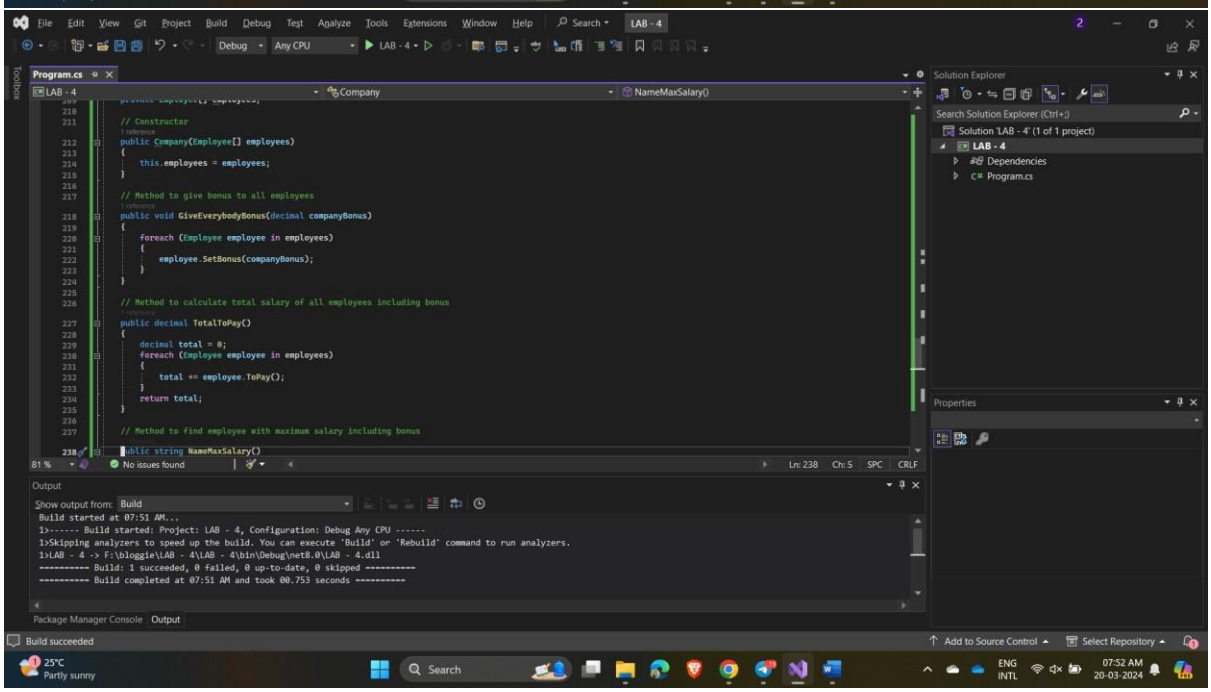
OUTPUT :

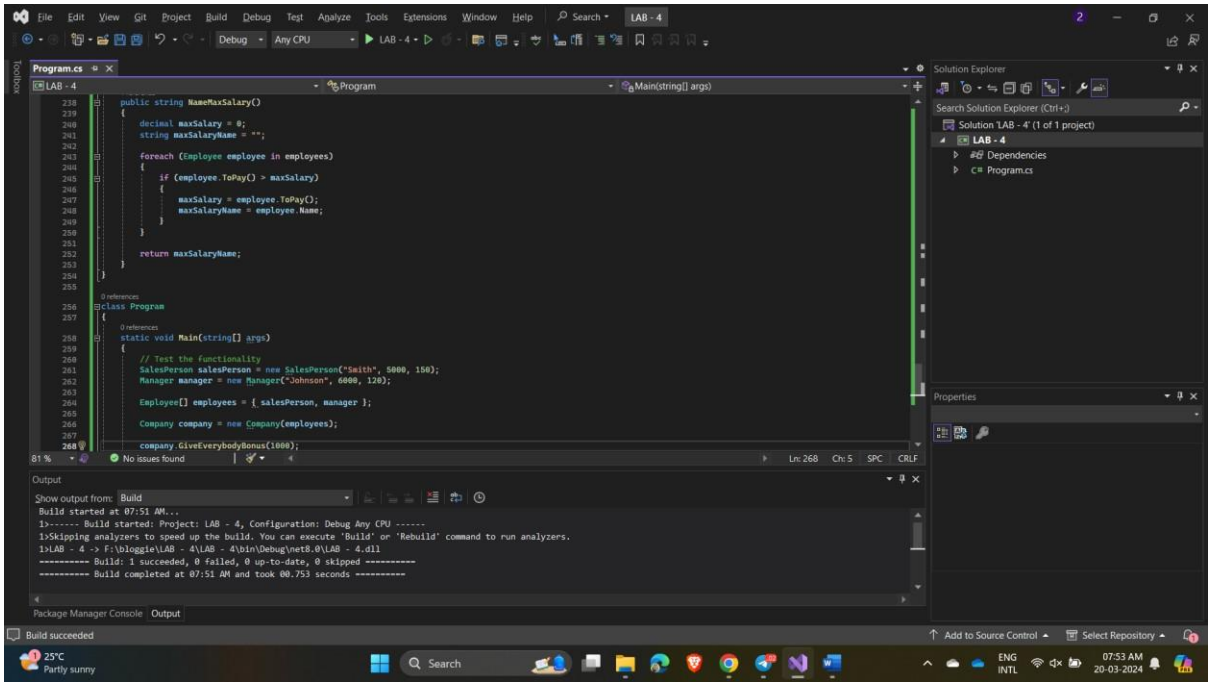

Microsoft Visual Studio Debu
SalesPerson Payment: 7000
Manager Payment: 8000
Total Payroll: 15000
F:\bloggie\LAB - 4\LAB - 4\bin\Debug\net8.0\LAB - 4.exe (process 24240) exited with code 0.
Press any key to close this window . . .

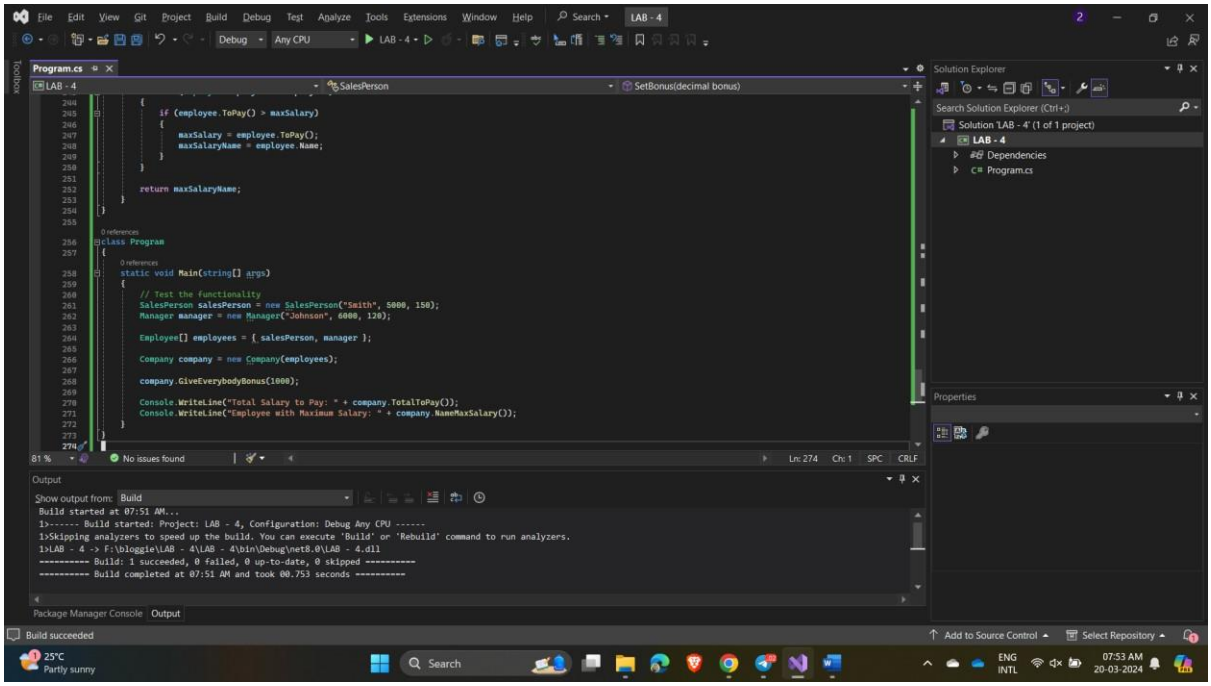

File Edit View Git Project Build Debug Test Analyze Tools Extensions Window Help
Search
LAB - 4
Debug
Any CPU
Program.cs
LAB - 4
Employee
ToPay()
using System;
// Base class Employee
class Employee
{
// Fields
private string name;
private decimal salary;
private decimal bonus;
// Properties
public string Name { get { return name; } }
public decimal Salary { get { return salary; } }
// Constructor
public Employee(string name, decimal salary)
{
this.name = name;
this.salary = salary;
}
// Virtual method to set bonus
public virtual void SetBonus(decimal bonus)
{
this.bonus = bonus;
}
// Method to calculate total payment
Solution Explorer
Search Solution Explorer (Ctrl+;)
Solution 'LAB - 4' (1 of 1 project)
LAB - 4
Dependencies
Program.cs
Properties
No issues found
Ln: 150 Ch: 6 SPC CRLF
Output
Show output from: Build
Build started at 07:51 AM...
1>------ Build started: Project: LAB - 4, Configuration: Debug Any CPU ------
1>Skipping analyzers to speed up the build. You can execute 'Build' or 'Rebuild' command to run analyzers.
1>LAB - 4 -> F:\bloggie\LAB - 4\LAB - 4\bin\Debug\net8.0\LAB - 4.dll
========== Build: 1 succeeded, 0 failed, 0 up-to-date, 0 skipped ==========
========== Build completed at 07:51 AM and took 00.753 seconds ==========
Package Manager Console
Output
Build succeeded
Add to Source Control
Select Repository
25°C
Partly sunny
Search
ENG
INTL
07:52 AM
20-03-2024


File Edit View Git Project Build Debug Test Analyze Tools Extensions Window Help
Search
LAB - 4
Debug
Any CPU
Program.cs
LAB - 4
SalesPerson
SetBonus(decimal bonus)
public decimal ToPay()
{
return salary + bonus;
}
}
// SalesPerson class inheriting from Employee
class SalesPerson : Employee
{
// Fields
private int percent;
// Constructor
public SalesPerson(string name, decimal salary, int percent) : base(name, salary)
{
this.percent = percent;
}
// RedeFining SetBonus method
public override void SetBonus(decimal bonus)
{
if (percent > 200)
base.SetBonus(bonus * 3); // Triple bonus
else if (percent > 100)
base.SetBonus(bonus * 2); // Double bonus
else
base.SetBonus(bonus);
}
}
Solution Explorer
Search Solution Explorer (Ctrl+;)
Solution 'LAB - 4' (1 of 1 project)
LAB - 4
Dependencies
Program.cs
Properties
No issues found
Ln: 179 Ch: 2 SPC CRLF
Output
Show output from: Build
Build started at 07:51 AM...
1>------ Build started: Project: LAB - 4, Configuration: Debug Any CPU ------
1>Skipping analyzers to speed up the build. You can execute 'Build' or 'Rebuild' command to run analyzers.
1>LAB - 4 -> F:\bloggie\LAB - 4\LAB - 4\bin\Debug\net8.0\LAB - 4.dll
========== Build: 1 succeeded, 0 failed, 0 up-to-date, 0 skipped ==========
========== Build completed at 07:51 AM and took 00.753 seconds ==========
Package Manager Console
Output
Build succeeded
Add to Source Control
Select Repository
25°C
Partly sunny
Search
ENG
INTL
07:52 AM
20-03-2024

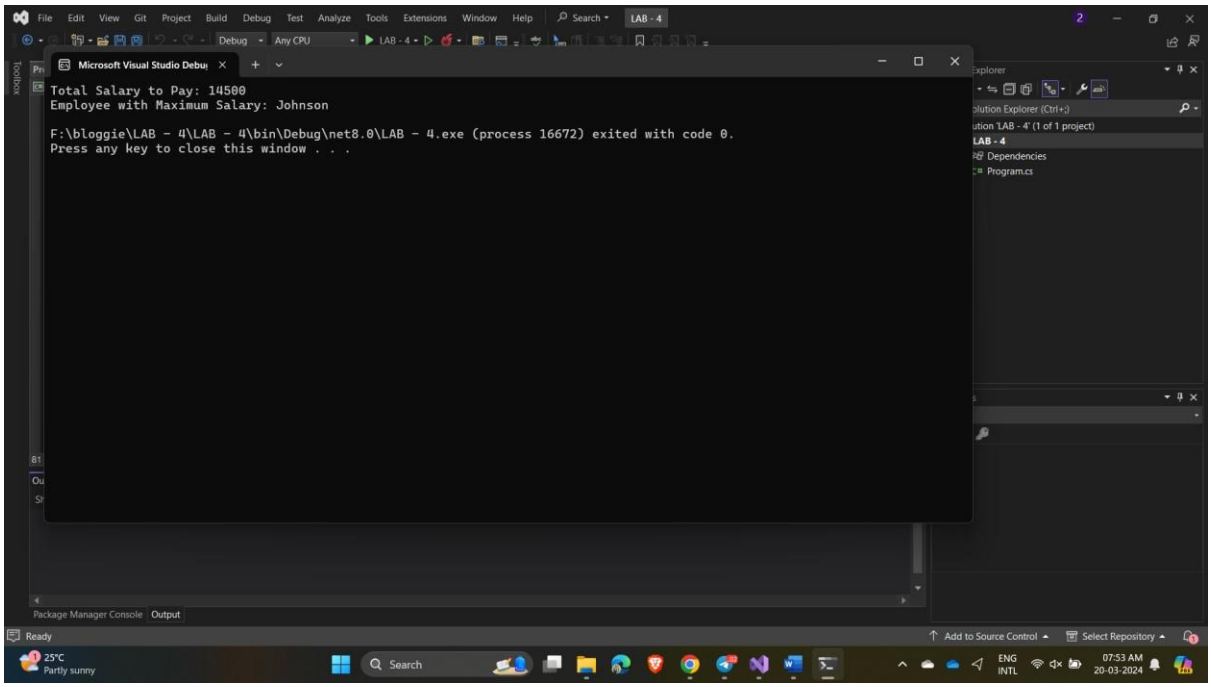

File Edit View Git Project Build Debug Test Analyze Tools Extensions Window Help
Search
LAB - 4
Debug
Any CPU
Program.cs
LAB - 4
Company
employees
// Manager class inheriting from Employee
class Manager : Employee
{
// Fields
private int quantity;
// Constructor
public Manager(string name, decimal salary, int quantity) : base(name, salary)
{
this.quantity = quantity;
}
// Redefining SetBonus method
public override void SetBonus(decimal bonus)
{
if (quantity > 150)
base.SetBonus(bonus + 1000); // Bonus increased by 1000
else if (quantity > 100)
base.SetBonus(bonus + 500); // Bonus increased by 500
else
base.SetBonus(bonus);
}
}
// Company class
class Company
{
// Field
private Employee[] employees;
No issues found
Ln: 209 Ch: 5 SPC CRLF
Output
Show output from: Build
Build started at 07:51 AM...
1>------ Build started: Project: LAB - 4, Configuration: Debug Any CPU ------
1>Skipping analyzers to speed up the build. You can execute 'Build' or 'Rebuild' command to run analyzers.
1>LAB - 4 -> F:\bloggie\LAB - 4\LAB - 4\bin\Debug\net8.0\LAB - 4.dll
========== Build: 1 succeeded, 0 failed, 0 up-to-date, 0 skipped ==========
========== Build completed at 07:51 AM and took 00.753 seconds ==========
Package Manager Console
Output
Solution Explorer
Search Solution Explorer (Ctrl+;)
Solution 'LAB - 4' (1 of 1 project)
LAB - 4
Dependencies
Program.cs
Properties
Build succeeded
Add to Source Control
Select Repository
25°C
Partly sunny
Search
ENG
INTL
07:52 AM
20-03-2024


File Edit View Git Project Build Debug Test Analyze Tools Extensions Window Help
Search
LAB - 4
Debug
Any CPU
Program.cs
LAB - 4
Company
NameMaxSalary()
// Constructor
public Company(Employee[] employees)
{
this.employees = employees;
}
// Method to give bonus to all employees
public void GiveEverybodyBonus(decimal companyBonus)
{
foreach (Employee employee in employees)
{
employee.SetBonus(companyBonus);
}
}
// Method to calculate total salary of all employees including bonus
public decimal TotalToPay()
{
decimal total = 0;
foreach (Employee employee in employees)
{
total += employee.ToPay();
}
return total;
}
// Method to find employee with maximum salary including bonus
public string NameMaxSalary()
No issues found
Ln: 238 Ch: 5 SPC CRLF
Output
Show output from: Build
Build started at 07:51 AM...
1>------ Build started: Project: LAB - 4, Configuration: Debug Any CPU ------
1>Skipping analyzers to speed up the build. You can execute 'Build' or 'Rebuild' command to run analyzers.
1>LAB - 4 -> F:\bloggie\LAB - 4\LAB - 4\bin\Debug\net8.0\LAB - 4.dll
========== Build: 1 succeeded, 0 failed, 0 up-to-date, 0 skipped ==========
========== Build completed at 07:51 AM and took 00.753 seconds ==========
Package Manager Console
Output
Solution Explorer
Search Solution Explorer (Ctrl+;)
Solution 'LAB - 4' (1 of 1 project)
LAB - 4
Dependencies
Program.cs
Properties
Build succeeded
Add to Source Control
Select Repository
25°C
Partly sunny
Search
ENG
INTL
07:52 AM
20-03-2024


File Edit View Git Project Build Debug Test Analyze Tools Extensions Window Help
Search
LAB - 4
Debug
Any CPU
LAB - 4
Program.cs
LAB - 4
Program
Main(string[] args)
public string NameMaxSalary()
{
decimal maxSalary = 0;
string maxSalaryName = "";
foreach (Employee employee in employees)
{
if (employee.ToPay() > maxSalary)
{
maxSalary = employee.ToPay();
maxSalaryName = employee.Name;
}
}
return maxSalaryName;
}
}
0 references
class Program
{
0 references
static void Main(string[] args)
{
// Test the functionality
SalesPerson salesPerson = new SalesPerson("Smith", 5000, 150);
Manager manager = new Manager("Johnson", 6000, 120);
Employee[] employees = { salesPerson, manager };
Company company = new Company(employees);
company.GiveEverybodyBonus(1000);
No issues found
Ln: 268 Ch: 5 SPC CRLF
Solution Explorer
Search Solution Explorer (Ctrl+;)
Solution 'LAB - 4' (1 of 1 project)
LAB - 4
Dependencies
Program.cs
Properties
Output
Show output from: Build
Build started at 07:51 AM...
1>------ Build started: Project: LAB - 4, Configuration: Debug Any CPU ------
1>Skipping analyzers to speed up the build. You can execute 'Build' or 'Rebuild' command to run analyzers.
1>LAB - 4 -> F:\bloggie\LAB - 4\LAB - 4\bin\Debug\net8.0\LAB - 4.dll
========== Build: 1 succeeded, 0 failed, 0 up-to-date, 0 skipped ==========
========== Build completed at 07:51 AM and took 00.753 seconds ==========
Package Manager Console
Output
Build succeeded
Add to Source Control
Select Repository
25°C
Partly sunny
Search
ENG
INTL
07:53 AM
20-03-2024


File Edit View Git Project Build Debug Test Analyze Tools Extensions Window Help
Search
LAB - 4
Debug
Any CPU
LAB - 4
Program.cs
LAB - 4
SalesPerson
SetBonus(decimal bonus)
if (employee.ToPay() > maxSalary)
{
maxSalary = employee.ToPay();
maxSalaryName = employee.Name;
}
}
return maxSalaryName;
}
}
0 references
class Program
{
0 references
static void Main(string[] args)
{
// Test the functionality
SalesPerson salesPerson = new SalesPerson("Smith", 5000, 150);
Manager manager = new Manager("Johnson", 6000, 120);
Employee[] employees = { salesPerson, manager };
Company company = new Company(employees);
company.GiveEverybodyBonus(1000);
Console.WriteLine("Total Salary to Pay: " + company.TotalToPay());
Console.WriteLine("Employee with Maximum Salary: " + company.NameMaxSalary());
}
}
No issues found
Ln: 274 Ch: 1 SPC CRLF
Solution Explorer
Search Solution Explorer (Ctrl+;)
Solution 'LAB - 4' (1 of 1 project)
LAB - 4
Dependencies
Program.cs
Properties
Output
Show output from: Build
Build started at 07:51 AM...
1>------ Build started: Project: LAB - 4, Configuration: Debug Any CPU ------
1>Skipping analyzers to speed up the build. You can execute 'Build' or 'Rebuild' command to run analyzers.
1>LAB - 4 -> F:\bloggie\LAB - 4\LAB - 4\bin\Debug\net8.0\LAB - 4.dll
========== Build: 1 succeeded, 0 failed, 0 up-to-date, 0 skipped ==========
========== Build completed at 07:51 AM and took 00.753 seconds ==========
Package Manager Console
Output
Build succeeded
Add to Source Control
Select Repository
25°C
Partly sunny
Search
ENG
INTL
07:53 AM
20-03-2024

OUTPUT :


Microsoft Visual Studio Debu
Total Salary to Pay: 14500
Employee with Maximum Salary: Johnson
F:\bloggie\LAB - 4\LAB - 4\bin\Debug\net8.0\LAB - 4.exe (process 16672) exited with code 0.
Press any key to close this window . . .
Package Manager Console
Output
Ready
Add to Source Control
Select Repository
Search
25°C
Partly sunny
ENG
INTL
07:53 AM
20-03-2024