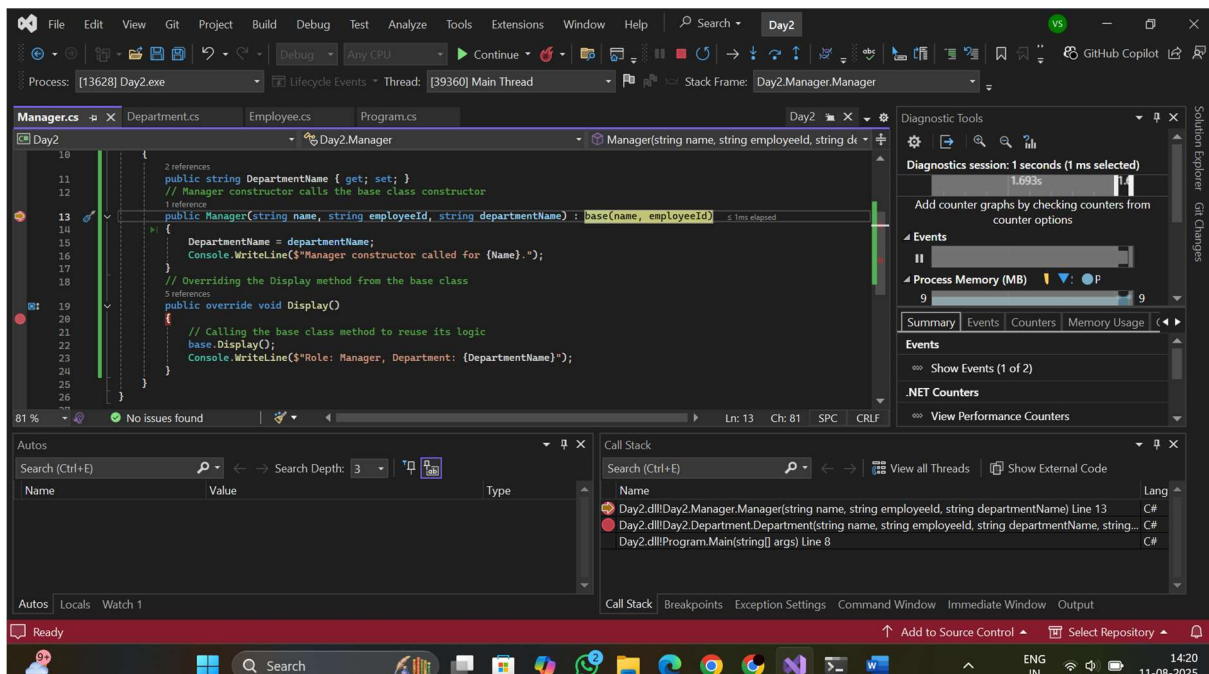
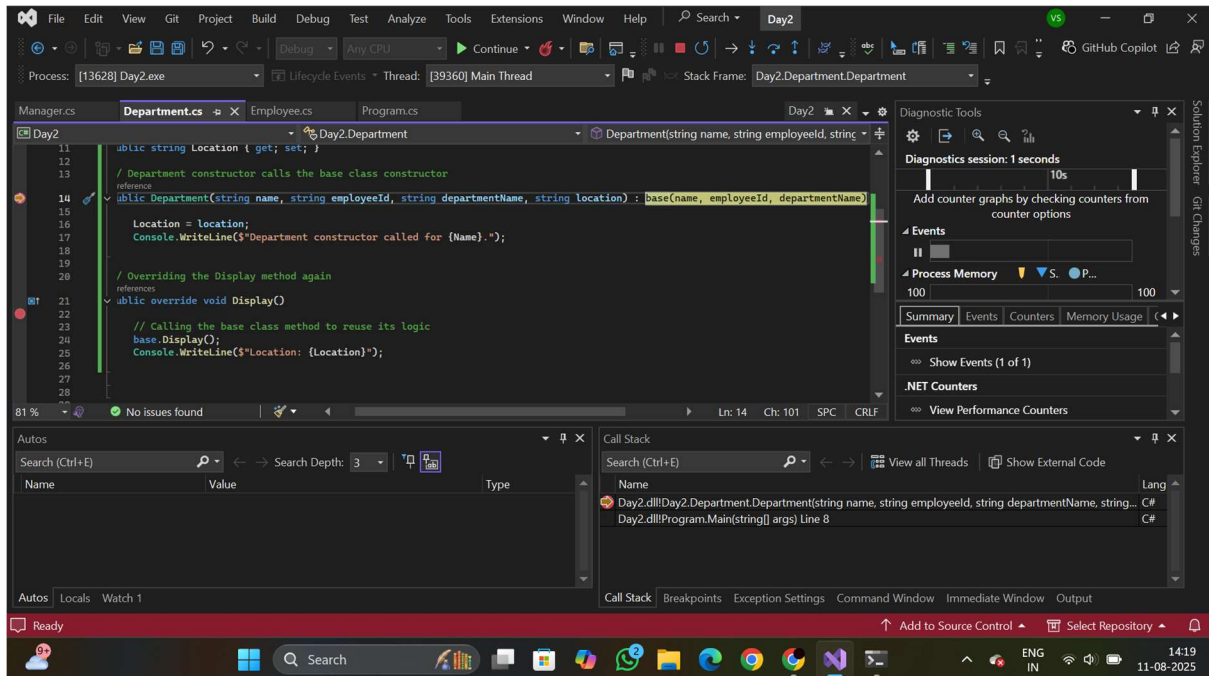
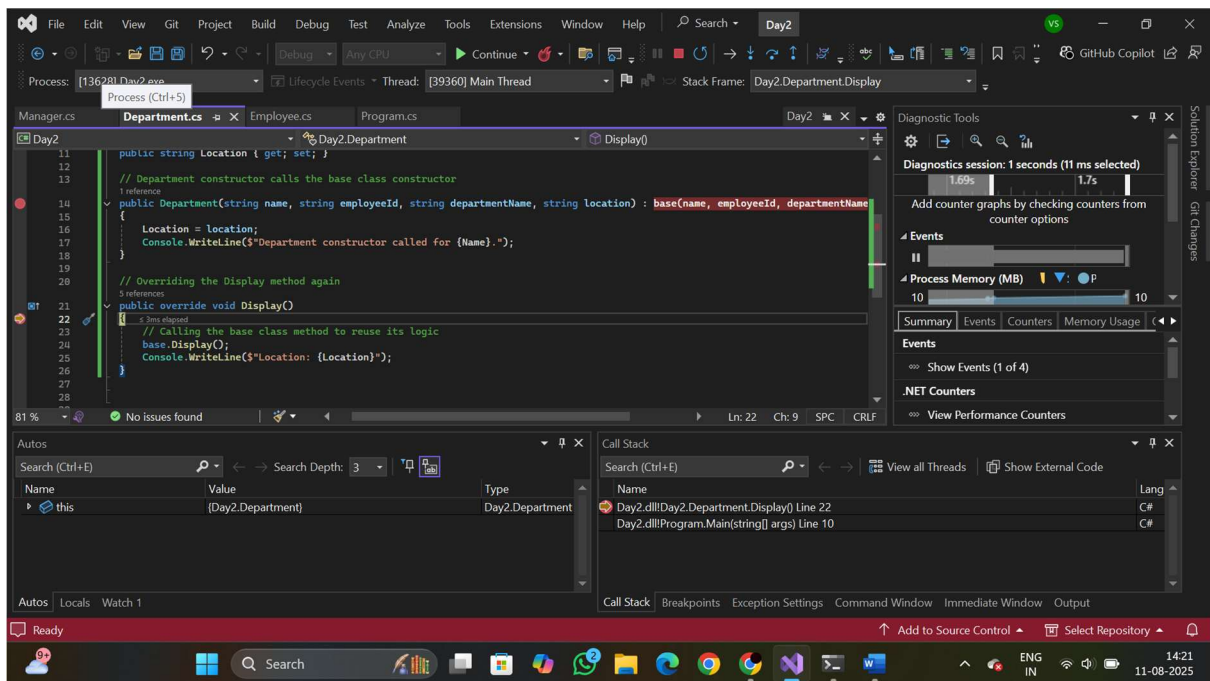
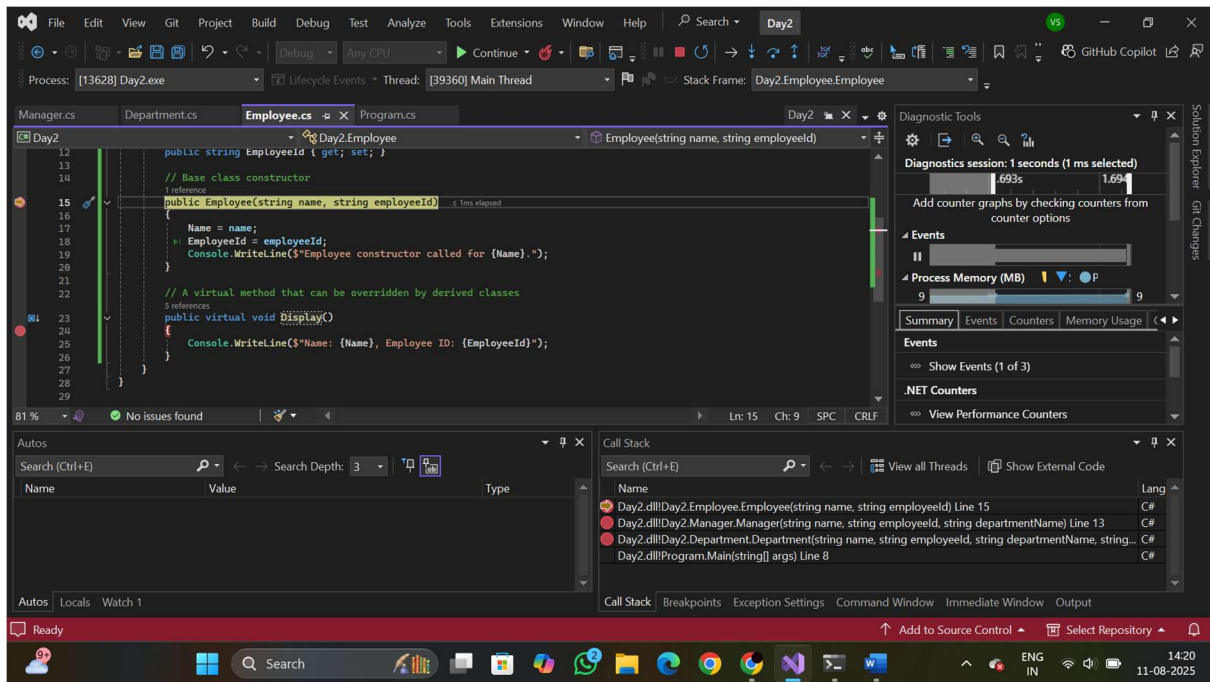


Hands on

Day 2 C#

Snapshots :





Visual Studio IDE showing the Day2 project. The main window displays the Day2.cs file, which contains the Manager class. The code is as follows:

```
11 public string DepartmentName { get; set; }
12 // Manager constructor calls the base class constructor
13 public Manager(string name, string employeeId, string departmentName) : base(name, employeeId)
14 {
15     DepartmentName = departmentName;
16     Console.WriteLine($"Manager constructor called for {Name}.");
17 }
18 // Overriding the Display method from the base class
19 public override void Display()
20 {
21     // Calling the base class method to reuse its logic
22     base.Display();
23     Console.WriteLine($"Role: Manager, Department: {DepartmentName}");
24 }
25
26
27
28
29
```

The right-hand pane shows the Diagnostic Tools window, which displays a summary of the diagnostic session (1 seconds, 1 ms selected). The Events tab is selected, showing a list of events (1 of 5). The Process Memory (MB) tab is also visible, showing a memory usage of 10 MB.

The bottom pane shows the Autos window, which displays the current state of the program. The variable 'this' is listed with the value '(Day2.Department)' and the type 'Day2.Manager...'. The Call Stack window is also visible, showing the current call stack with the following entries:

- Day2.dll|Day2.Manager.Display() Line 20
- Day2.dll|Day2.Department.Display() Line 24
- Day2.dll|Program.Main(string[] args) Line 10

The status bar at the bottom indicates the program is running (Ready) and the current thread is [39360] Main Thread.

Visual Studio IDE showing the Day2 project. The main window displays the Employee.cs file, which contains the Employee class. The code is as follows:

```
12 public string EmployeeId { get; set; }
13
14 // Base class constructor
15 public Employee(string name, string employeeId)
16 {
17     Name = name;
18     EmployeeId = employeeId;
19     Console.WriteLine($"Employee constructor called for {Name}.");
20 }
21
22 // A virtual method that can be overridden by derived classes
23 public virtual void Display()
24 {
25     Console.WriteLine($"Name: {Name}, Employee ID: {EmployeeId}");
26 }
27
28
29
30
31
```

The right-hand pane shows the Diagnostic Tools window, which displays a summary of the diagnostic session (1 seconds, 1 ms selected). The Events tab is selected, showing a list of events (1 of 6). The Process Memory (MB) tab is also visible, showing a memory usage of 10 MB.

The bottom pane shows the Autos window, which displays the current state of the program. The variable 'this' is listed with the value '(Day2.Department)' and the type 'Day2.Employee...'. The Call Stack window is also visible, showing the current call stack with the following entries:

- Day2.dll|Day2.Employee.Display() Line 24
- Day2.dll|Day2.Manager.Display() Line 22
- Day2.dll|Day2.Department.Display() Line 24
- Day2.dll|Program.Main(string[] args) Line 10

The status bar at the bottom indicates the program is running (Ready) and the current thread is [39360] Main Thread.

```
File Edit View Git Project Build Debug Test Analyze Tools Extensions Window Help Search Day2
C:\Users\vijit\Kanini Internshi
Multi-Level Inheritance
Employee constructor called for John Doe.
Manager constructor called for John Doe.
Department constructor called for John Doe.

Displaying information for the Department:
Name: John Doe, Employee ID: E123
Role: Manager, Department: IT
Location: Building A
81 %
Autos
Search
Name
Autos
Ready
14:22 11-08-2025
```

```
File Edit View Git Project Build Debug Test Analyze Tools Extensions Window Help Search Day2
C:\Users\vijit\Kanini Internshi
Customer.cs
Day2
Customer name successfully set to: Customer1
Current customer name: Customer1
Error: Cannot set name to 'Michael'. Only 'Customer1' is allowed.
Current customer name: Customer1
=====
Enter number:
20
Enter number:
4
Result from ref parameter method: 5.00
Result from out parameter method: 5
Remainder from out parameter method: 0
=====
Multi-Level Inheritance
81 %
Autos
Search (Click)
Name
Autos
Loc
Ready
15:14 11-08-2025
```

