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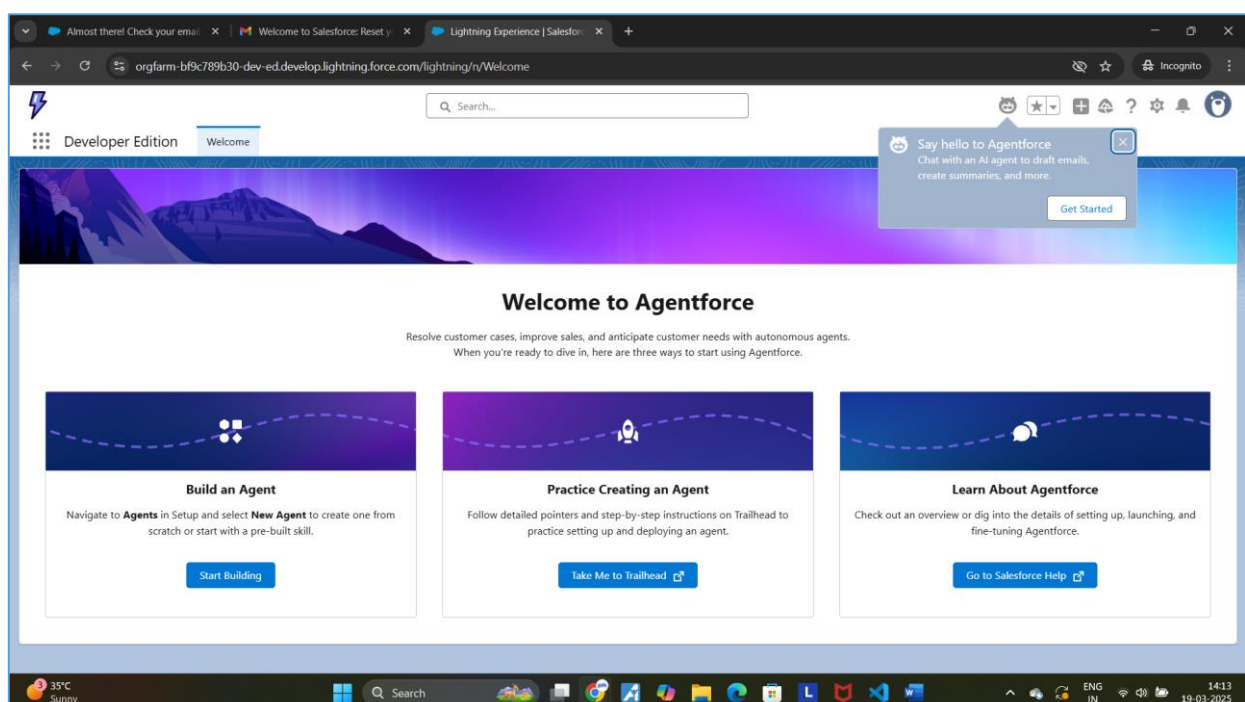
## **Practical 03**

**Aim:** Creating an Application in SalesForce.com using Apex Programming Language.

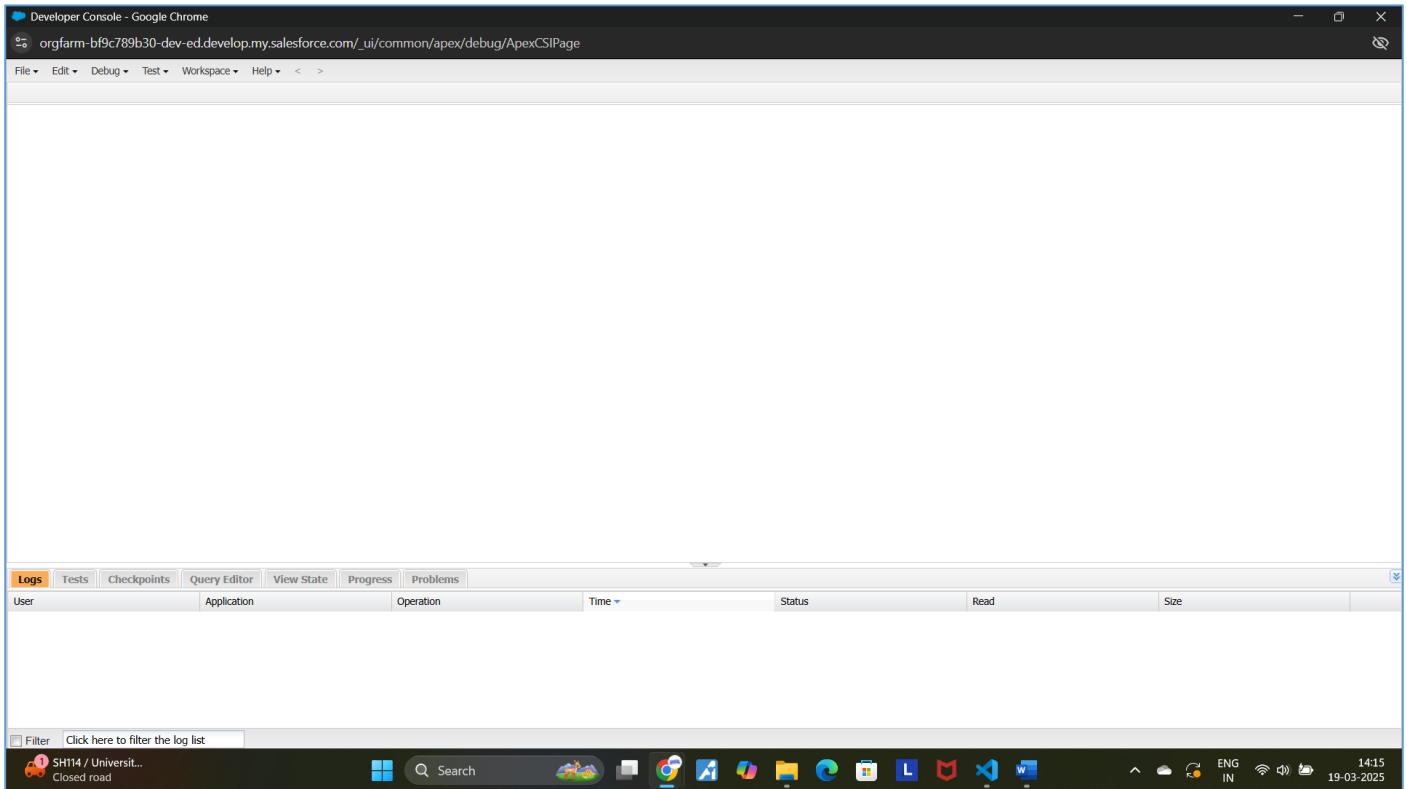
**Step 1: Signup here** <https://www.salesforce.com/form/developer-signup/?d=pb>

The screenshot shows the Salesforce Developer Edition signup page. On the left, there's a blue background with the Salesforce logo and text: "Build enterprise-quality apps fast and get hands-on with Agentforce and Data Cloud." Below this, it says "Sign up for your Developer Edition." and lists five benefits: "Build apps fast with drag-and-drop tools", "Go further with Apex code", "Build AI agents with Agentforce", "Harmonize your data with Data Cloud", and "Ground Agentforce with structured and unstructured data". At the bottom left, there's an illustration of an Agentforce robot. On the right, there's a white form titled "Sign up for your Developer Edition". The form includes fields for "First name" (piyusha), "Last name" (supe), "Job title" (student), "Work email" (pihusupe@gmail.com), "Company" (AISSMSCOE), and "Country/Region" (India). Below the form, there's a checkbox for "I agree to the Main Services Agreement" and a link to the "Privacy Statement".

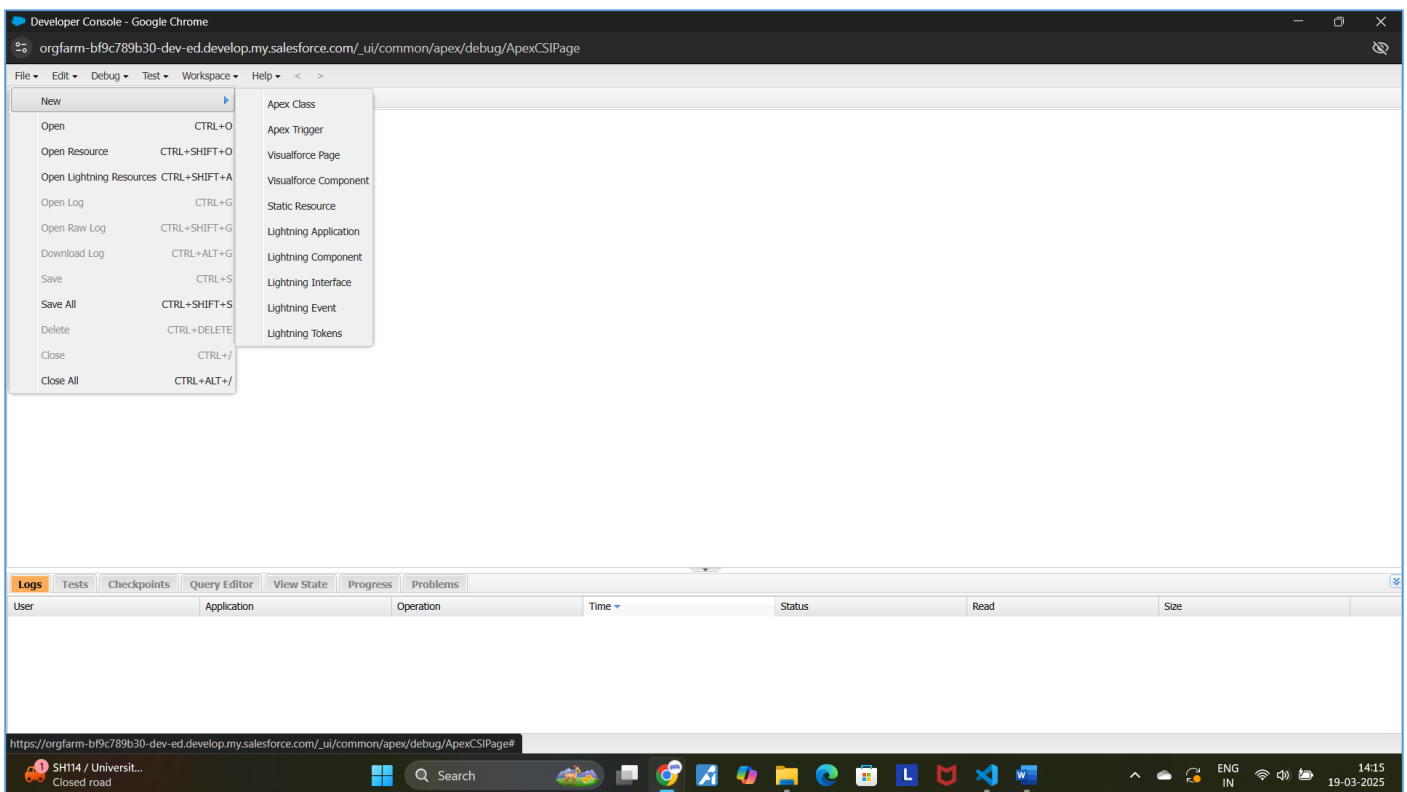
**Step 2: Login here** <https://login.salesforce.com/>



**Step 3: Click on developer console: in right most corner, you will see below console window:**

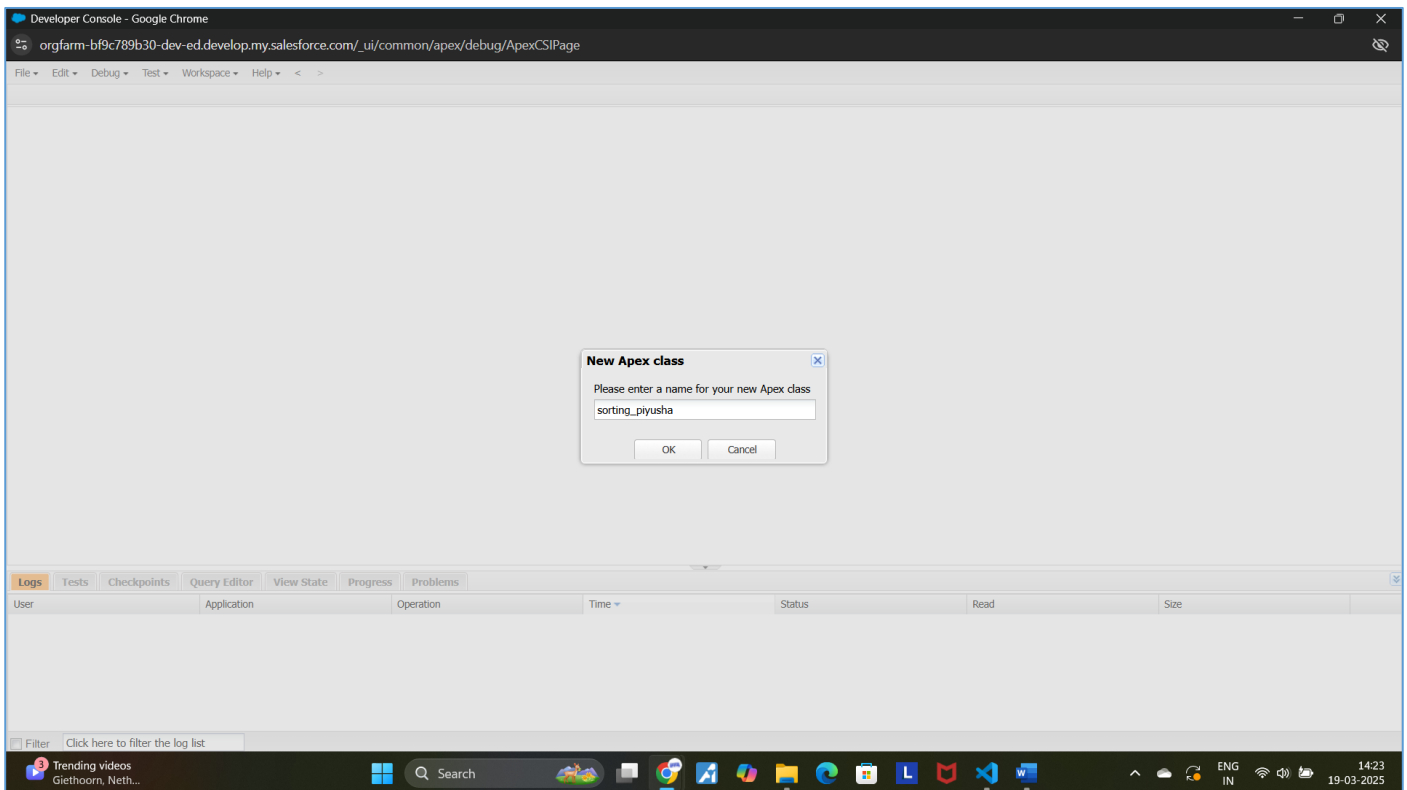
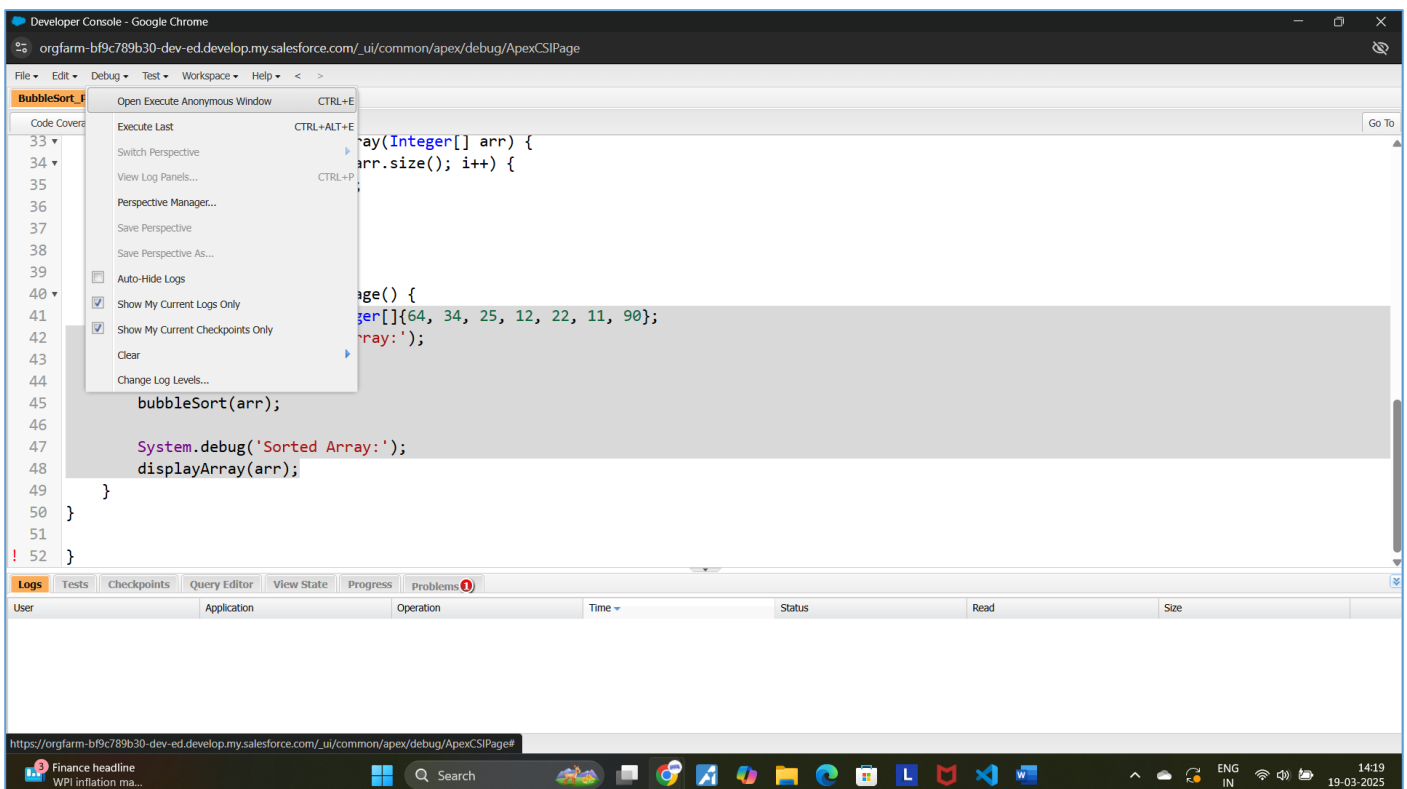


**Step 4: Go to file > select new > select apex class**



**Step 5: Write class name as per your requirement for example**

So here class name will be “sorting\_piyusha”

**Step 6: Then go to debug > Open Execute Anonymous Window >**

## Step 7: Then Execute

The screenshot shows the Salesforce Developer Console with the Apex code for a bubble sort algorithm. The code is as follows:

```

1 public class sorting_piyusha {
2
3     // Bubble Sort Method
4     public static List<Integer> bubbleSort(List<Integer> arr) {
5         Integer n = arr.size();
6         for (Integer i = 0; i < n - 1; i++) {
7             for (Integer j = 0; j < n - i - 1; j++) {
8                 if (arr[j] > arr[j + 1]) {
9                     // Swap elements
10                    Integer temp = arr[j];
11                    arr[j] = arr[j + 1];
12                    arr[j + 1] = temp;
13                }
14            }
15        }
16        return arr; // Return the sorted list
17    }
18 }
19

```

An "Enter Apex Code" dialog box is open, showing the same code with the following modifications:

```

1 // Define a list of numbers to sort
2 List<Integer> numbers = new List<Integer>{64, 34, 25, 12, 22, 11, 90};
3
4 // Call the bubbleSort method and store the result
5 List<Integer> sortedNumbers = sorting_piyusha.bubbleSort(numbers);
6
7 // Print the sorted list in debug logs
8 System.debug('Sorted Array: ' + sortedNumbers);
9

```

The bottom of the console shows the "Problems" tab, which is currently empty. The system tray at the bottom indicates a temperature of 35°C, sunny weather, and the time 14:40 on 19-03-2025.

## Step 8: Select Debug only and check output

The screenshot shows the Salesforce Developer Console with the "Execution Log" tab selected. The log displays various events and details for the execution of the code. The log is as follows:

Timestamp	Event	Details
14:40:46:001	USER_INFO	[EXTERNAL]005gK000000h35u piyushupe817@agentforce.com (GMT-07:00) Pacific Daylight Time (America/Los Angeles) GMT-07:00
14:40:46:001	EXECUTION_ST...	
14:40:46:001	CODE_UNIT_ST...	[EXTERNAL] execute_anonymous_apex
14:40:46:002	VARIABLE_SCO...	[2] numbers List<Integer> true false
14:40:46:002	VARIABLE_SCO...	[5] sortedNumbers List<Integer> true false
14:40:46:002	HEAP_ALLOCATE	[93] Bytes:3
14:40:46:002	HEAP_ALLOCATE	[98] Bytes:152
14:40:46:002	HEAP_ALLOCATE	[415] Bytes:408
14:40:46:002	HEAP_ALLOCATE	[428] Bytes:408
14:40:46:002	HEAP_ALLOCATE	[536] Bytes:48
14:40:46:002	HEAP_ALLOCATE	[247] Bytes:6
14:40:46:002	HEAP_ALLOCATE	[EXTERNAL] Bytes:5
14:40:46:002	STATEMENT_EX...	[1]
14:40:46:002	STATEMENT_EX...	[2]
14:40:46:002	HEAP_ALLOCATE	[2] Bytes:4
14:40:46:002	HEAP_ALLOCATE	[2] Bytes:4
14:40:46:002	HEAP_ALLOCATE	[2] Bytes:4
14:40:46:002	HEAP_ALLOCATE	[2] Bytes:4
14:40:46:002	HEAP_ALLOCATE	[2] Bytes:4
14:40:46:002	HEAP_ALLOCATE	[2] Bytes:4
14:40:46:002	HEAP_ALLOCATE	[2] Bytes:4

The bottom of the console shows the "Problems" tab, which is currently empty. The system tray at the bottom indicates a temperature of 35°C, sunny weather, and the time 14:40 on 19-03-2025.

The screenshot shows the Salesforce Developer Console interface. The browser address bar displays the URL: `orgfarm-bf9c789b30-dev-ed.develop.my.salesforce.com/_ui/common/apex/debug/ApexCSIPage`. The menu bar includes File, Edit, Debug, Test, Workspace, and Help. A tab for `sorting_piyusha.apxc` is open, with a log entry: `Log executeAnonymous @3/19/2025, 2:40:46 PM`. The Execution Log table is visible, showing a single entry:

Timestamp	Event	Details
14:40:46:004	USER_DEBUG	[8] DEBUG Sorted Array: (11, 12, 22, 25, 34, 64, 90)

Below the log, there are tabs for Logs, Tests, Checkpoints, Query Editor, View State, Progress, and Problems. The Windows taskbar at the bottom shows the date as 19-03-2025 and time as 14:41.

This is a second, identical screenshot of the Salesforce Developer Console. It shows the same interface with the Execution Log containing the debug message: `[8]|DEBUG|Sorted Array: (11, 12, 22, 25, 34, 64, 90)`.

**Conclusion:** Thus I have successfully implemented an application on salesforce cloud using apex.