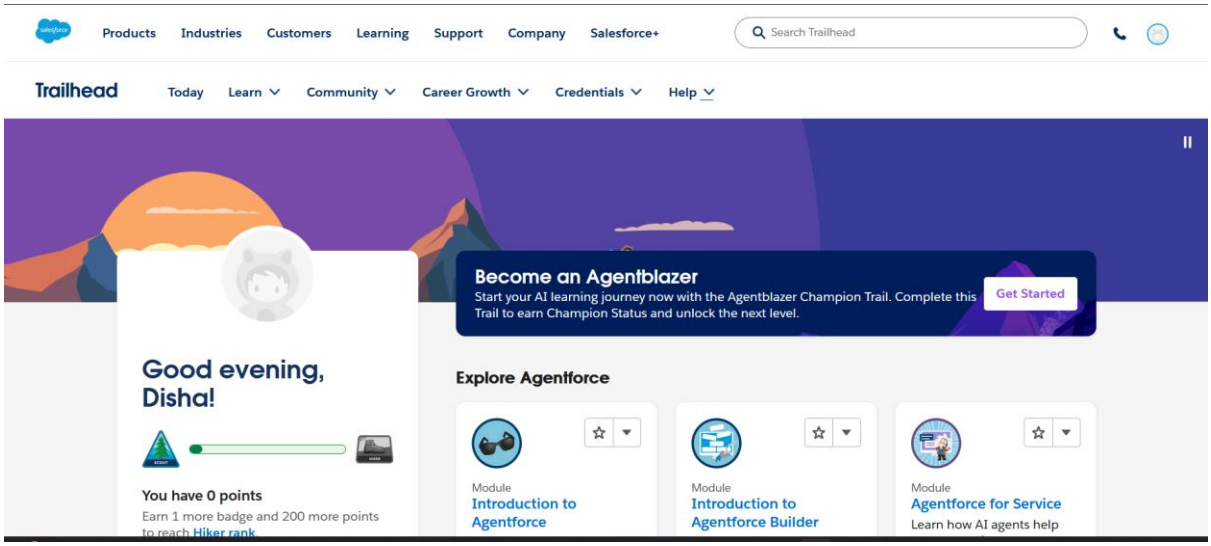
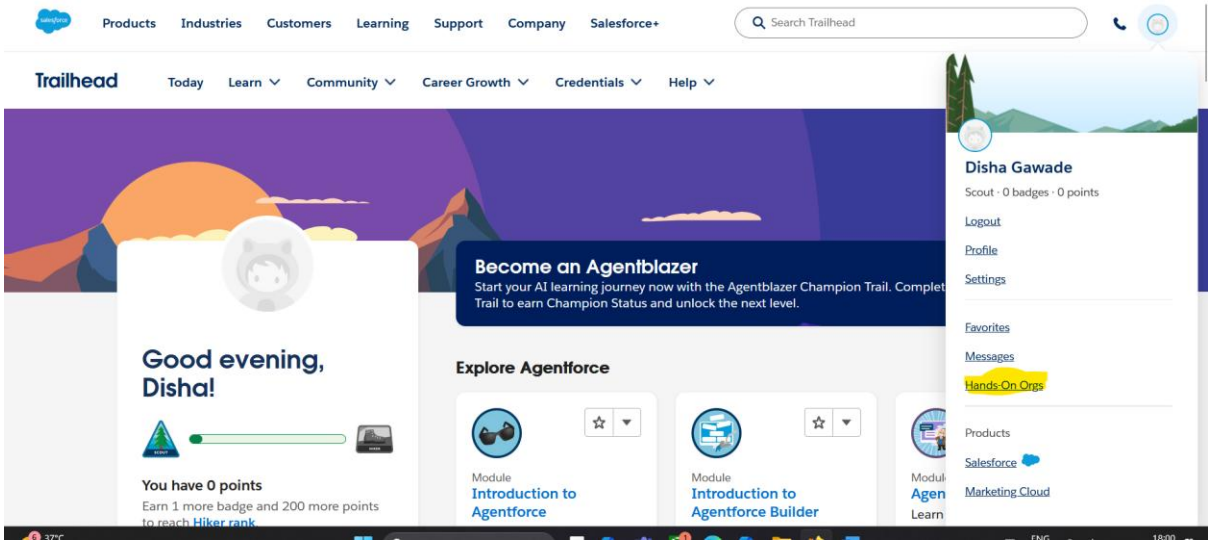
19.Creating an application in salesForce.com using Apex Programming Language

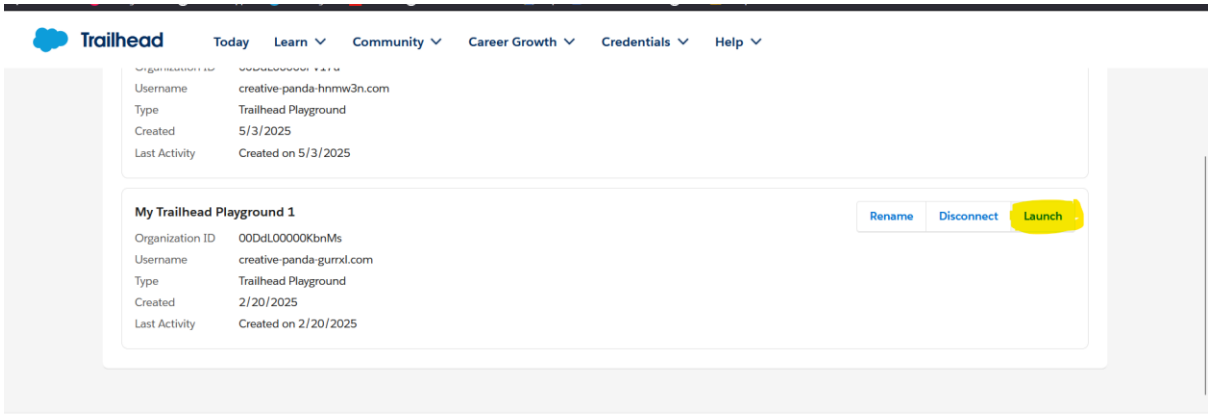
.Print message “Welcome to Apex Programming Language of sale force Platform”.

Step1 :- Create account and login

https://trailhead.salesforce.com/today



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Rename
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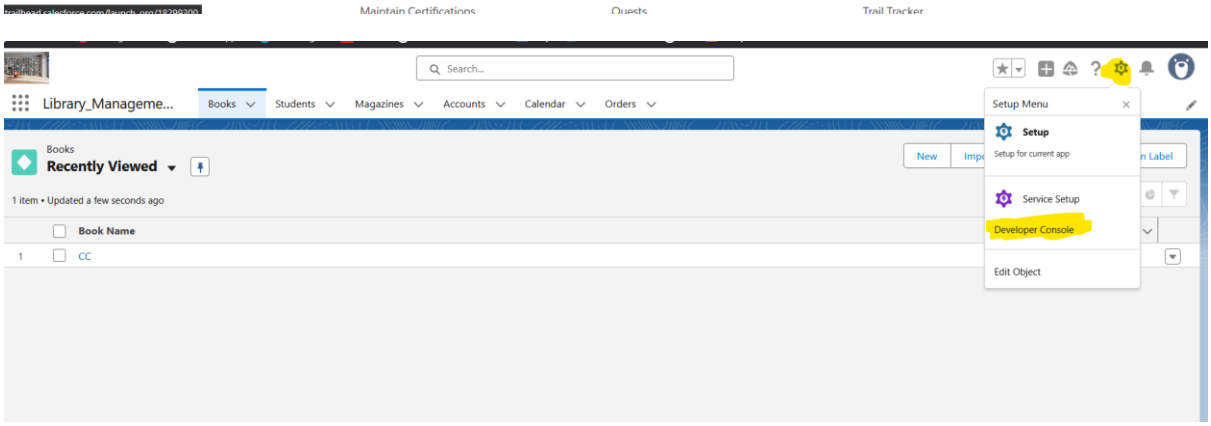
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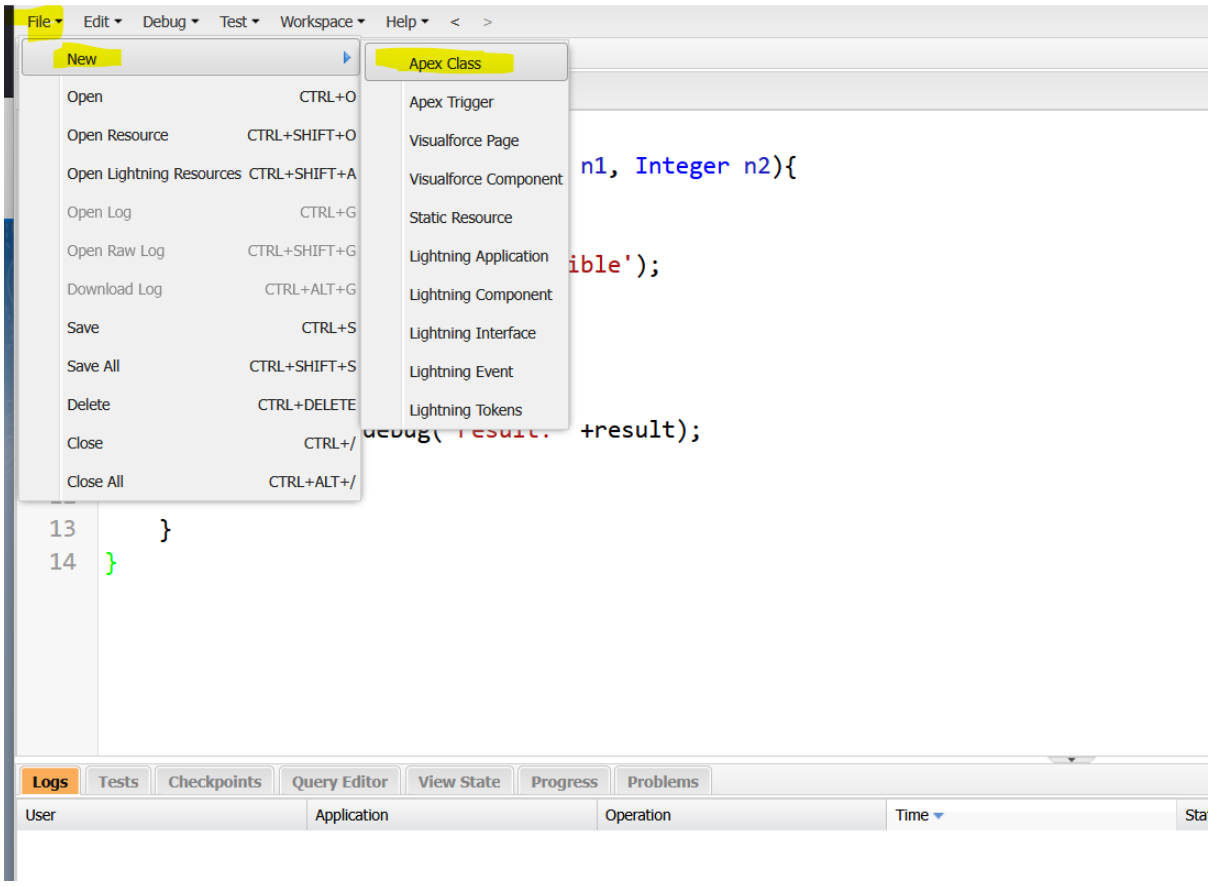
File
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Debug
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Workspace
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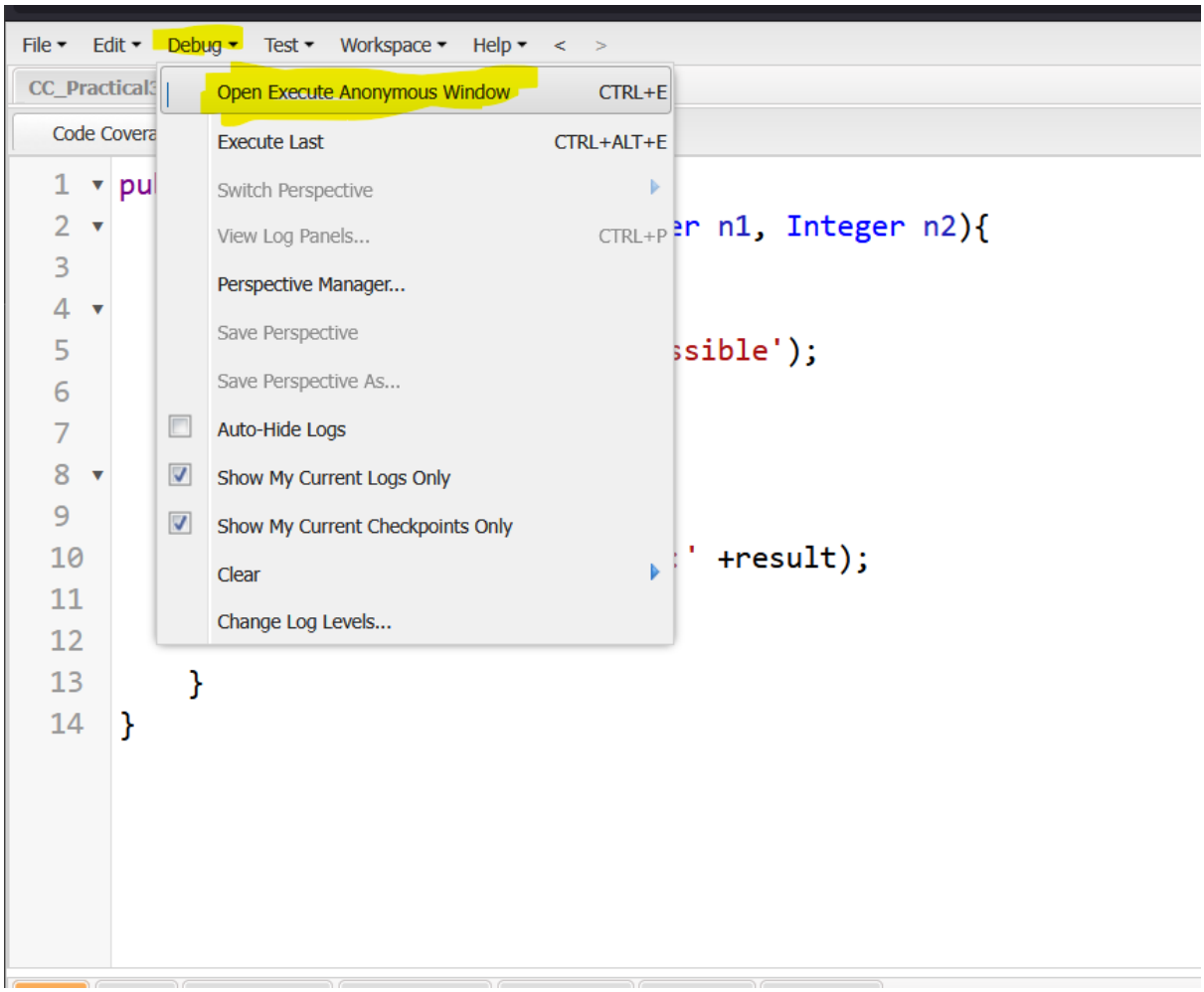
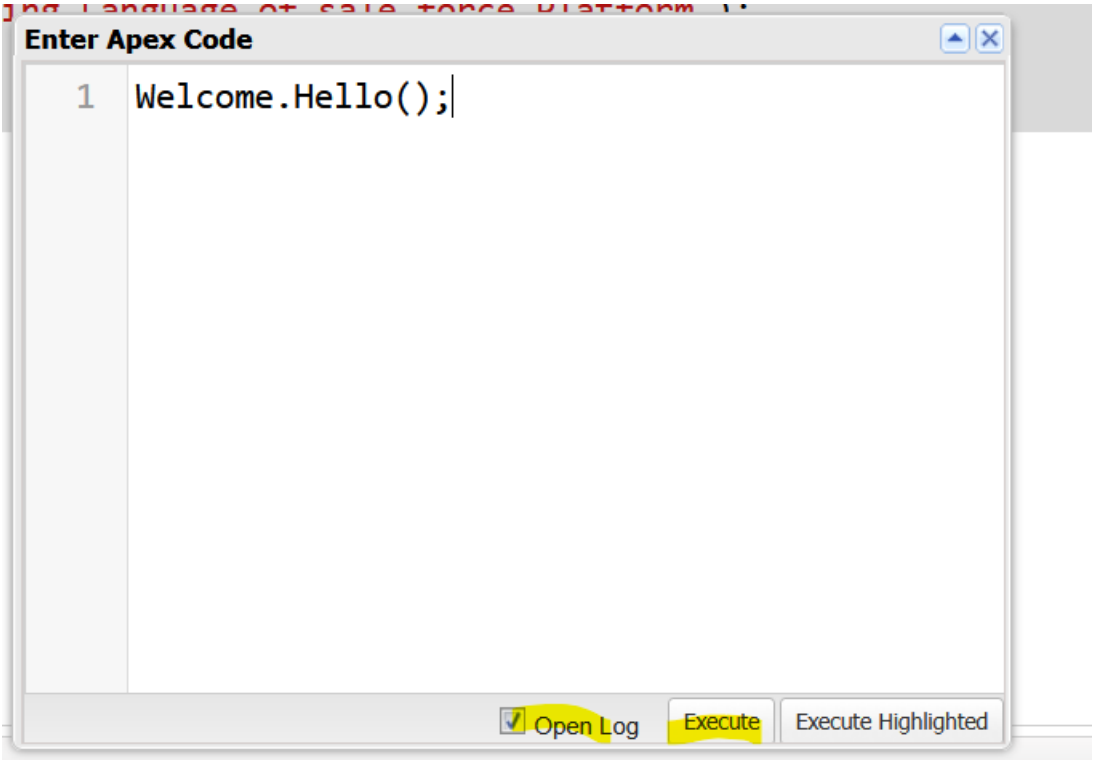
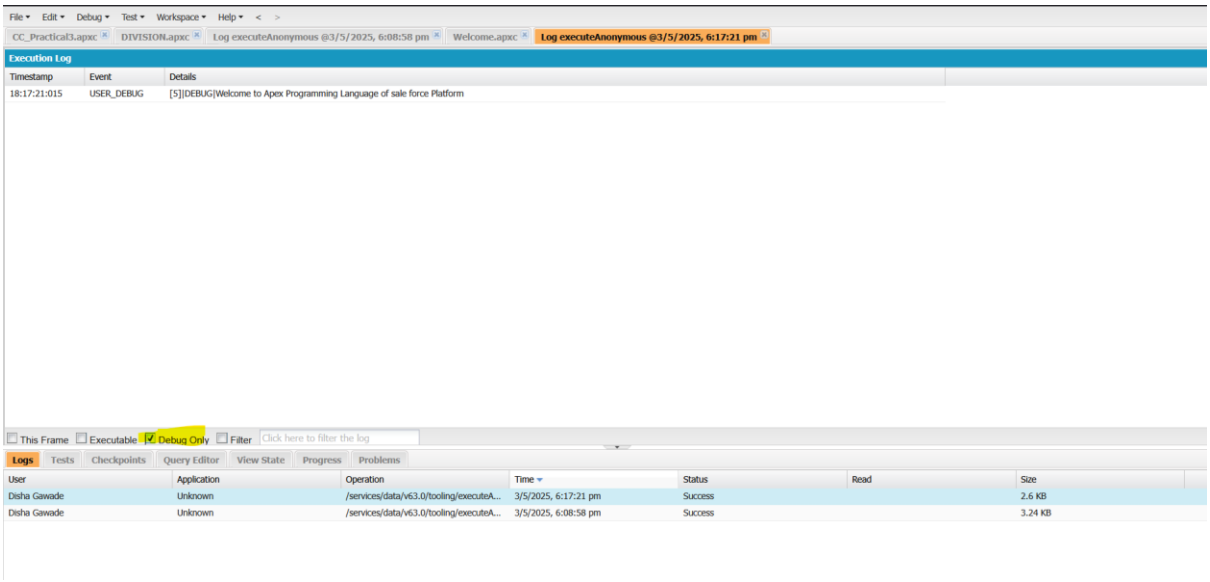
13 }
14 }
Logs
Tests
Checkpoints
Query Editor
View State
Progress
Problems
User
Application
Operation
Time

```
public class MultiplesOfTen {
    public static void displayTable() {
        for (Integer i = 1; i <= 10; i++) {
            Integer result = 10 * i;
            System.debug('5 x ' + i + ' = ' + result);
        }
    }
}
```







Line-by-Line Explanation of the Code

apex

public class MultiplesOfFive { // Defines a public Apex class named "MultiplesOfFive".

public static void displayTable() { // Declares a static method "displayTable" that returns nothing (void).

for (Integer i = 1; i <= 10; i++) { // Starts a loop where "i" iterates from 1 to 10.

```
        Integer result = 10 * i; // Calculates the product of 10 and the loop variable "i".
        System.debug('5 x ' + i + ' = ' + result); // Logs a string to the debug output (e.g., "5 x 1 = 10").
      }
   }
}
```

Key Concepts Used in the Code

1. Apex Class

Purpose: Encapsulates logic related to generating a multiplication table.

Code: public class MultiplesOfFive { ... }

Details: The class is declared as public, making it accessible across the Salesforce org.

2. Static Method

Purpose: Allows calling the method without creating an instance of the class.

Code: public static void displayTable() { ... }

Usage: Invoked directly via MultiplesOfFive.displayTable().

3. For Loop

Purpose: Iterates over a fixed range (1 to 10).

Code: for (Integer i = 1; i <= 10; i++) { ... }

Details: i is an Integer variable that increments from 1 to 10.

4. Arithmetic Operations

Purpose: Computes the product of 10 and i.

Code: Integer result = 10 * i;

Issue: The output shows "5 x i = result", but the calculation uses 10, not 5. This is likely a typo.

5. String Concatenation

Purpose: Combines static text and variables into a debug message.

Code: System.debug('5 x ' + i + ' = ' + result);

Output: Logs lines like 5 x 1 = 10, which is mathematically incorrect (should be 10 x 1 = 10 or 5 x i = 5i).

6. Debugging

Purpose: Outputs results to the Salesforce debug logs.

Code: System.debug(...)

How to View: Open Debug Logs in the Salesforce Developer Console.

Data Types in Apex

Apex supports both primitive and composite data types. Here’s a breakdown:

1. Primitive Data Types

These are basic types built into the language:

Data Type Description & Example

Integer	Whole numbers (e.g., Integer num = 10;).
Double	Decimal numbers (e.g., Double price = 19.99;).
Long	Large integers (e.g., Long bigNumber = 2147483648L;).
String	Text (e.g., String name = 'Salesforce';).
Boolean	true or false (e.g., Boolean isActive = true;).
Date	Date without time (e.g., Date today = Date.today();).
Datetime	Date and time (e.g., Datetime now = Datetime.now();).
Time	Time without a date (e.g., Time meetingTime = Time.newInstance(14, 30, 0, 0);).
ID	Salesforce record ID (e.g., Id accountId = '001xx000003DGb0';).
Blob	Binary data (e.g., Blob fileData = Blob.valueOf('Hello World');).
Object	Generic type (e.g., Object obj = 10; // Can hold any data type).