

Experiment 5: Variable and Scope of Variable

5.4. Declare a static local variable inside a function. Observe how its value persists across function calls.

Ans-:

```
#include <stdio.h>

void demoFunction() {

    printf("Name - Aryan kamboj\nSAP ID - 590025526\ncourse - BCA\nBatch - 6");
    printf("\n-----\n");

    static int count = 0; // Static local variable
    count++;

    printf("Value of count: %d\n", count);
}

int main() {
    demoFunction(); // First call → count = 1
    demoFunction(); // Second call → count = 2
    demoFunction(); // Third call → count = 3

    return 0;
}
```

Output:

```
aryankamboj@Users-MacBook-Air lab_8 % cd "/Users/aryankamboj/Desktop/c_programming_theory/lab_8/" && gcc tempCodeRunnerFile.c -o tempCodeRunnerFile && "/Users/aryankamboj/Desktop/c_programming_theory/lab_8/"tempCodeRunnerFile
Name - Aryan kamboj
SAP ID - 590025526
course - BCA
Batch - 6
-----
Value of count: 1
Name - Aryan kamboj
SAP ID - 590025526
course - BCA
Batch - 6
-----
Value of count: 2
Name - Aryan kamboj
SAP ID - 590025526
course - BCA
Batch - 6
-----
Value of count: 3
```