

## Experiment 5: Variable and Scope of Variable

**5.2. Declare a local variable inside a function and try to access it outside the function. Compare this with accessing the global variable from within the function.**

**Ans-:**

```
#include <stdio.h>

// Global variable
int globalVar = 100;

void demoFunction() {
    printf("Name - Aryan kamboj\nSAP ID - 590025526\ncourse - BCA\nBatch - 6");
    printf("\n-----\n");
    int localVar = 20; // Local variable (accessible only inside this function)

    printf("Inside demoFunction:\n");
    printf("Local variable: %d\n", localVar);
    printf("Global variable: %d\n", globalVar);
}

int main() {
    demoFunction();

    // Trying to access localVar here will cause an ERROR
    // printf("%d", localVar); //
    printf("\nInside main:\n");
    printf("Global variable: %d\n", globalVar);

    return 0;
}
```

**Output:**

```
aryankamboj@users-MacBook-Air lab_8 % cd "/Users/aryankamboj/Desktop/c_programming_theory/lab_8/" && gcc  
5.2.c -o 5.2 && "/Users/aryankamboj/Desktop/c_programming_theory/lab_8/"5.2  
Name - Aryan kamboj  
SAP ID - 590025526  
course - BCA  
Batch - 6  
-----  
Inside demoFunction:  
Local variable: 20  
Global variable: 100  
  
Inside main:  
Global variable: 100
```