

Experiment-4

Q.1 Declare a global variable outside all functions and use it inside various functions to understand its accessibility.

```
# Include <stdio.h>
```

```
int counter = 0;
```

```
void increment() {
```

```
    counter ++;
```

```
    printf("Inside increment() ; counter = %d / n",  
          counter);
```

```
}
```

```
void multiply() {
```

```
    counter * = 2;
```

```
    printf("Inside multiply() ; counter = %d / n",  
          counter);
```

```
}
```

```
int main() {
```

```
    printf("Initially : counter = %d / n", counter);
```

```
    increment();
```

```
    increment();
```

```
    multiply();
```

```
    printf("In main() after function calls: counter = %d / n",  
          counter);
```

```
    return 0;
```

```
}
```

Teacher's Signature



Online Compiler

main.c

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Run

```
1 #include <stdio.h>
2
3 int counter = 0;
4
5 void increment() {
6     counter++;
7     printf("Inside increment(): counter = %d\n", counter);
8 }
9
10 void multiply() {
11     counter *= 2;
12     printf("Inside multiply(): counter = %d\n", counter);
13 }
14
15 int main() {
16     printf("Initially: counter = %d\n", counter);
17
18     increment();
19     increment();
20     multiply();
21
22     printf("In main() after function calls: counter = %d\n",
23           counter);
24
25     return 0;
26 }
```

Output

```
Initially: counter = 0
Inside increment(): counter = 1
Inside increment(): counter = 2
Inside multiply(): counter = 4
In main() after function calls: counter = 4

=== Code Execution Successful ===
```