**CSA1413- COMPILER DESIGN FOR INTERMEDIATE LANGUAGE**

**NAME – AKILA S**

**REG NUMBER – 192424331**

Implement a C program to eliminate left Factoring.

**PROGRAM:**

```
#include <stdio.h>
#include <string.h>

int main() {
    char A[10], common[10], beta1[10], beta2[10];

    printf("Enter non-terminal (A): ");
    scanf("%s", A);
    printf("Enter common prefix: ");
    scanf("%s", common);
    printf("Enter remaining part of first production (β1): ");
    scanf("%s", beta1);
    printf("Enter remaining part of second production (β2): ");
    scanf("%s", beta2);

    printf("After left factoring:\n");
    printf("%s -> %s%s'\n", A, common, A);
    printf("%s' -> %s | %s\n", A, beta1, beta2);
    return 0;
}
```

**OUTPUT:**

```
Enter non-terminal (A): A
Enter common prefix: a
Enter remaining part of first production (β1): b
Enter remaining part of second production (β2): c
After left factoring:
A -> aA'
A' -> b | c


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