

CSA1413- COMPILER DESIGN FOR INTERMEDIATE LANGUAGE

NAME – AKILA S

REG NUMBER – 192424331

Implement a C program to eliminate left recursion.

PROGRAM:

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

int main() {
    char A[10], alpha[10], beta[10];

    printf("Enter non-terminal (A): ");
    scanf("%s", A);
    printf("Enter beta (non-recursive part): ");
    scanf("%s", beta);
    printf("Enter alpha (recursive part): ");
    scanf("%s", alpha);

    printf("After eliminating left recursion:\n");
    printf("%s -> %s%s\n", A, beta, A);
    printf("%s' -> %s%s' | ε\n", A, alpha, A);

    return 0;
}
```

OUTPUT:

```
Enter non-terminal (A): A
Enter beta (non-recursive part): b
Enter alpha (recursive part): a
After eliminating left recursion:
A -> bA'
A' -> aA' |  $\epsilon$ 
```

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