

LAB

1. Estimate the effort, development time, and staff size for a semi-detached software project of 32 KLOC. Use Intermediate COCOMO. Suppose the cost drivers after rating give EAF (Effort Adjustment Factor) = 1.15. Use proper value for constant like a,b,c and d in case of semi-detached project. (4 marks)
2. Consider the following program written in C:

```
int sum(int n) {
    int s = 0;
    for (int i = 1; i <= n; i++) {
        s = s + i;
    }
    return s;
}
```

Using Halstead's metrics do the following:

3. Identify the distinct operators (n1) and distinct operands (n2).
4. Count the total occurrences of operators (N1) and operands (N2).
5. Compute:
 - a. Program vocabulary (n)
 - b. Program length (N)
 - c. Program volume (V)
 - d. Program difficulty (D)
 - e. Effort (E)
 - f. Time to program
 - g. Estimated delivery bugs [0.5+0.5+1*5=6 marks]