

b.c

```
1  #include <stdio.h>
2  #include <time.h>
3
4  int main() {
5      clock_t Run_time, Done_counting_time, Run_time2, Done_counting_time2;
6      double total_time;
7      double total_time2;
8      int num = 1;
9      int num2 = 1;
10     int total_time_c = 0;
11     int total_time_asm = 0;
12     Run_time = clock();
13
14     for (int i = 0; i < 100000000; i++) {
15         num <= 2;
16         total = total + num * (num - 1);
17     }
18
19     Done_counting_time = clock();
20
21     total_time = (double)(Done_counting_time - Run_time) / CLOCKS_PER_SEC;
22     printf("No of Instuction In C LANGUAGE : %d\n", total_time_c);
23     printf("First Instuction Time Process : %ld\n", Run_time);
24     printf("Last Instuction Time Process : %ld\n", Done_counting_time);
25     printf("Total Process Time ( C LANGUAGE ) : %.3f seconds\n", total_time);
26
27
28     Run_time2 = clock();
29
30     for (int i = 0; i < 100000000; i++) {
31         asm("lsl %[value], #2" : [value] "+r" (num2));
32         total_time_asm = total_time_asm + num2 * (num2 - 1);
33     }
34
35     Done_counting_time2 = clock();
36
37     total_time2 = (double)(Done_counting_time2 - Run_time2) / CLOCKS_PER_SEC;
38     printf("No of Instuction In Assembly LANGUAGE : %d\n", total_time_asm);
39     printf("First Instuction Time Process : %ld\n", Run_time2);
40     printf("Last Instuction Time Process : %ld\n", Done_counting_time2);
41     printf("Total Process Time ( Assembly LANGUAGE ) : %.3f seconds\n", total_time2);
42
43
44     return 0;
45 }
```