

## FOUR STAGE AND OPERATION.

EXP NO: 40

AIM: To write a C program to implement Four stage AND operation.

ALGORITHM:

### 1. Stage 1: Input

- Input two numbers, a and b.

### 2. Stage 2: Perform AND Operation

- Calculate  $res = a \& b$ .

### 3. Stage 3: Output Result

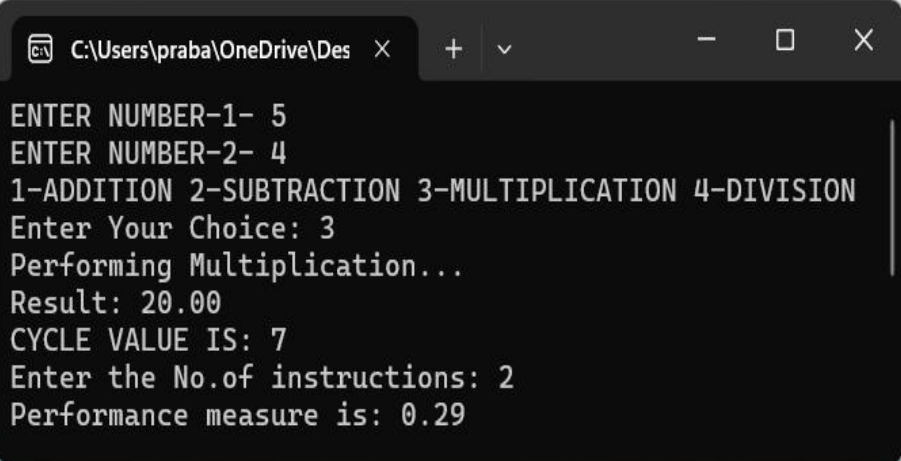
- Print the result res.

### 4. Stage 4: Performance Measurement

- Calculate and print the performance measure as  $INS / counter$ .

PROGRAM/OUTPUT SS:

```
1  #include <stdio.h>
2  int main() {
3      int counter = 1;
4      int a, b, choice;
5      float res = 0;
6      printf("ENTER NUMBER-1- ");
7      scanf("%d", &a);
8      counter++;
9      printf("ENTER NUMBER-2- ");
10     scanf("%d", &b);
11     counter++;
12     printf("1-ADDITION 2-SUBTRACTION 3-MULTIPLICATION 4-DIVISION\nEnter Your Choice: ");
13     scanf("%d", &choice);
14     if (choice == 1) {
15         printf("Performing Addition...\n");
16         res = a + b;
17         counter++;
18     } else if (choice == 2) {
19         printf("Performing Subtraction...\n");
20         res = a - b;
21         counter++;
22     } else if (choice == 3) {
23         printf("Performing Multiplication...\n");
24         res = a * b;
25         counter++;
26     } else if (choice == 4) {
27         if (b == 0) {
28             printf("Denominator can't be Zero\n");
29         } else {
30             printf("Performing Division...\n");
31             res = (float)a / b;
32         }
33         counter++;
34     } else {
35         printf("Enter Correct Input\n");
36     }
37     printf("Result: %.2f\n", res);
38     counter += 3;
39     printf("CYCLE VALUE IS: %d\n", counter);
40     int ins;
41     printf("Enter the No.of instructions: ");
42     scanf("%d", &ins);
43     float performance_measure = (float)ins / counter;
44     printf("Performance measure is: %.2f\n", performance_measure);
45     return 0;
46 }
```



```
ENTER NUMBER-1- 5
ENTER NUMBER-2- 4
1-ADDITION 2-SUBTRACTION 3-MULTIPLICATION 4-DIVISION
Enter Your Choice: 3
Performing Multiplication...
Result: 20.00
CYCLE VALUE IS: 7
Enter the No.of instructions: 2
Performance measure is: 0.29
```

RESULT: Thus the Code has been executed successfully using DevC++.