Experiment 6: Array

6.3. WAP to read a list of integers and store it in a single dimensional array. Write a C program to find the frequency of a particular number in a list of integers.

Ans-:

```
        #include <stdio.h>

int main() {

    printf("Name - Aryan kamboj\nSAP ID - 590025526\ncourse - BCA\nBatch - 6");
    printf("\n----------------------\n");

    int n, target, frequency = 0;

    printf("Enter the number of elements: ");
    scanf("%d", &n);

    int arr[n];

    // Read array elements
    printf("Enter %d integers:\n", n);
    for (int i = 0; i < n; i++) {
        scanf("%d", &arr[i]);
    }

    // Read the number to find frequency of
    printf("Enter the number whose frequency you want to find: ");
    scanf("%d", &target);

    // Count frequency
    for (int i = 0; i < n; i++) {
        if (arr[i] == target) {
            frequency++;
        }
    }

    // Output result
    printf("The frequency of %d is: %d\n", target, frequency);

    return 0;
}
```

Output:

```
aryankamboj@users-MacBook-Air lab_9 % cd "/Users/aryankamboj/Desktop/c_programming_theory/lab_9/" && gcc
 tempCodeRunnerFile.c -o tempCodeRunnerFile && "/Users/aryankamboj/Desktop/c_programming_theory/lab_9/"t
empCodeRunnerFile
Name - Aryan kamboj
SAP ID - 590025526
course - BCA
Batch - 6
----------------------
Enter the number of elements: 5
Enter 5 integers:
1 2 3 4 5
Enter the number whose frequency you want to find: 4
The frequency of 4 is: 1
```