### **Experiment No-06:** Nested loop and Array in C.

#### **Objectives**

- Write C Programs using nested for loop.
- Write C Programs using the one-dimensional array.
- Solve various problems using nested loop and array.

### **Example 1:** A C Program to demonstrate the use of nested for loop.

```
#include <stdio.h>
int main()
{
    int a, b;
    for(a = 1; a <= 5; a++)
    {
        for(b = 1; b <= 5; b++)
        {
            printf("%d ", b);
        }
        printf("\n");
    }
    return 0;
}</pre>
```

### **Example 2:** A C Program for array traversing.

```
#include <stdio.h>
int main() {
   int array[5], i;
   printf("Enter 5 integers: ");

// taking input and storing it in an array
for(i = 0; i < 5; ++i) {
    scanf("%d", &array[i]);
}

printf("Displaying integers: ");

// printing elements of an array
for(i = 0; i < 5; ++i) {
    printf("%d\n", array[i]);
}
   return 0;
}</pre>
```

#### Lab Task:

## **Practice Exercise**

1. Pattern Problems
1
22
333
4444
55555

1
12
123
1234
12345
55555
4444
333
22
1

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\* \* \* \*
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- 2. Write a C program to print all negative elements in an array.
- 3. Write a C program to count the total number of even and odd elements in an array.
- 4. Write a C program to copy all elements from an array to another array.
- 5. Write a C program to find the reverse of an array.
- 6. Write a C Program to find the sum of n numbers using array.

# Resources (Link)

[Nested Loop] [1D-Array]