DAY 1 – DS Using C Programs

```c
/*
Given five positive integers, find the minimum and maximum values that can be
calculated by summing exactly four of the five integers.

Sample Input:
a = [1,2,3,4,5]

Sample output:
10  14

Explanation:
Sum everything except 1, the sum is 2+3+4+5=14.
Sum everything except 2, the sum is 1+3+4+5=13.
Sum everything except 3, the sum is 1+2+4+5=12.
Sum everything except 4, the sum is 1+2+3+5=11.
Sum everything except 5, the sum is 1+2+3+4=10.
*/

#include <stdio.h>
#include <stdlib.h>

void main()
{
    int a[100], n, i, j;
    int sum, max = 0, min;

    printf("\nEnter the no. of array A[] elements: ");
    scanf("%d", &n);

    for (i = 0; i < n; i++)
    {
        printf("\nA[%d] = ", i);
        scanf("%d", &a[i]);
    }
    for (i = 0; i < n; i++)
    {
        sum = 0;
        for (j = 0; j < n; j++)
        {
            if (j != i) {
                sum += a[j];

                if(i == 0) {
                    min = sum;
                }
            }
```

```
        }

        if (max < sum)
            max = sum;

        if (min > sum)
            min = sum;
    }

    printf("\nThe Result is: \nMax = %d, Min = %d", max, min);

    printf("\n");
}
```

OUTPUT:

```
Enter the no. of array A[] elements: 5

A[0] = 1

A[1] = 2

A[2] = 3

A[3] = 4

A[4] = 5

The Result is:
Max = 14, Min = 10

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Days Code\" && gcc Day1.c -o Day1 && "e:
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Enter the no. of array A[] elements: 5

A[0] = 2

A[1] = 4

A[2] = 6

A[3] = 8

A[4] = 10

The Result is:
Max = 28, Min = 20
```