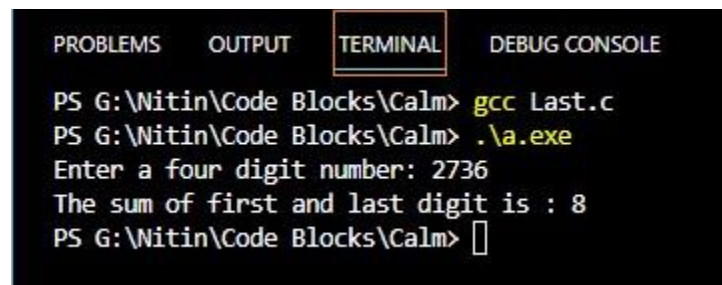


CSB Lab-6

Q1) If a four digit number is input through the keyboard, write a program to obtain the sum of the first and last digit of this number.

```
#include<stdio.h>
int main()
{
    int num, rem, i = 0;
    printf("Enter a four digit number: ");
    scanf("%d", &num);
    int dig[4];
    for (int dummy = num; dummy > 0; dummy = dummy/10)
    {
        rem = dummy%10;
        dig[i] = rem;
        i++;
    }
    printf("The sum of first and last digit is : %d", dig[0]+dig[3]);
}
```



```
PROBLEMS    OUTPUT    TERMINAL    DEBUG CONSOLE
PS G:\Witin\Code Blocks\Calm> gcc Last.c
PS G:\Witin\Code Blocks\Calm> .\a.exe
Enter a four digit number: 2736
The sum of first and last digit is : 8
PS G:\Witin\Code Blocks\Calm> 
```

Q2) Write a program to find GCD (Greatest Common Divisor) and LCM (Least Common Multiple) of two numbers.

```
#include<stdio.h>
int main()
{
    int num1, num2, grt, gcd;
    printf("Enter first number: ");
    scanf("%d", &num1);
```

```

printf("Enter second number: ");
scanf("%d", &num2);
if (num1>num2)
{grt = num1;}
else
{grt = num2;}
for (int i = 1; i < grt; i++)
{
    if (num1%i==0 && num2%i==0)
    {gcd = i;}
}
printf("GCD of %d and %d is : %d\n", num1, num2, gcd);
for (int j = grt; ; j++)
{
    if (j%num1==0 && j%num2==0)
    {printf("LCM of %d and %d is : %d", num1, num2, j);
    break;}
}
}

```

PROBLEMS	OUTPUT	TERMINAL	DEBUG CONSOLE
<pre> PS G:\Nitin\Code Blocks\Calm> gcc Hcf.c PS G:\Nitin\Code Blocks\Calm> .\a.exe Enter first number: 21 Enter second number: 14 GCD of 21 and 14 is : 7 LCM of 21 and 14 is : 42 PS G:\Nitin\Code Blocks\Calm> </pre>			

Q3) Read n integers, store them in an array and find their sum and average.

```

#include<stdio.h>
int main()
{
    int count, sum = 0;
    printf("How many integers do you want? ");
    scanf("%d", &count);

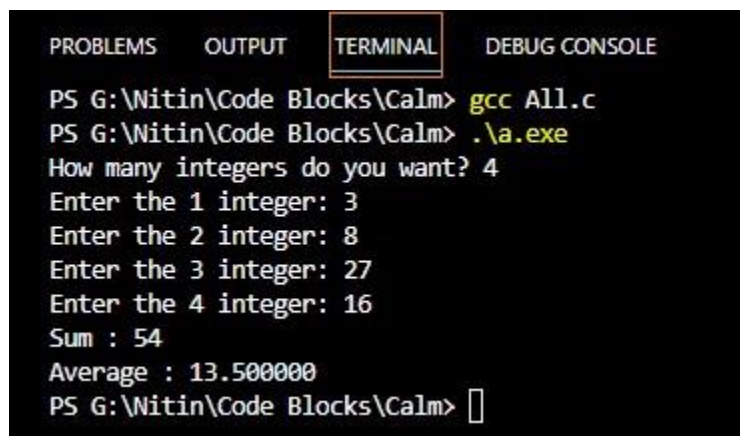
    int num[count];
    for (int i = 0; i < count; i++)
    {

```

```

        printf("Enter the %d integer: ", i+1);
        scanf("%d", &num[i]);
    }
    for (int j = 0; j < count; j++)
    {
        sum = sum + num[j];
    }
    printf("Sum : %d\n", sum);
    float avg = (float)sum/count;
    printf("Average : %f", avg);
}

```



```

PROBLEMS  OUTPUT  TERMINAL  DEBUG CONSOLE
PS G:\Nitin\Code Blocks\Calm> gcc All.c
PS G:\Nitin\Code Blocks\Calm> .\a.exe
How many integers do you want? 4
Enter the 1 integer: 3
Enter the 2 integer: 8
Enter the 3 integer: 27
Enter the 4 integer: 16
Sum : 54
Average : 13.500000
PS G:\Nitin\Code Blocks\Calm> 

```

Q4) Read n integers, store them in an array and search for an element in the array using any algorithm for Searching.

```

#include<stdio.h>
int main()
{
    int count, stop = 0, search;
    printf("How many integers do you want? ");
    scanf("%d", &count);
    int num[count];
    for (int i = 0; i < count; i++)
    {
        printf("Enter the %d integer: ", i+1);
        scanf("%d", &num[i]);
    }
    printf("Enter the element to search: ");
    scanf("%d", &search);
}

```

```
for (int j = 0; j < count; j++)
{
    if (num[j] == search)
    {stop = 1;}
}
if (stop == 1)
{printf("%d exists in array.", search);}
else
{printf("%d does not exist in array.", search);}
}
```

PROBLEMS OUTPUT **TERMINAL** DEBUG CONSOLE

```
PS G:\Witin\Code Blocks\Calm> gcc Search.c
PS G:\Witin\Code Blocks\Calm> .\a.exe
How many integers do you want? 3
Enter the 1 integer: 21
Enter the 2 integer: 16
Enter the 3 integer: 27
Enter the element to search: 21
21 exists in array.
```