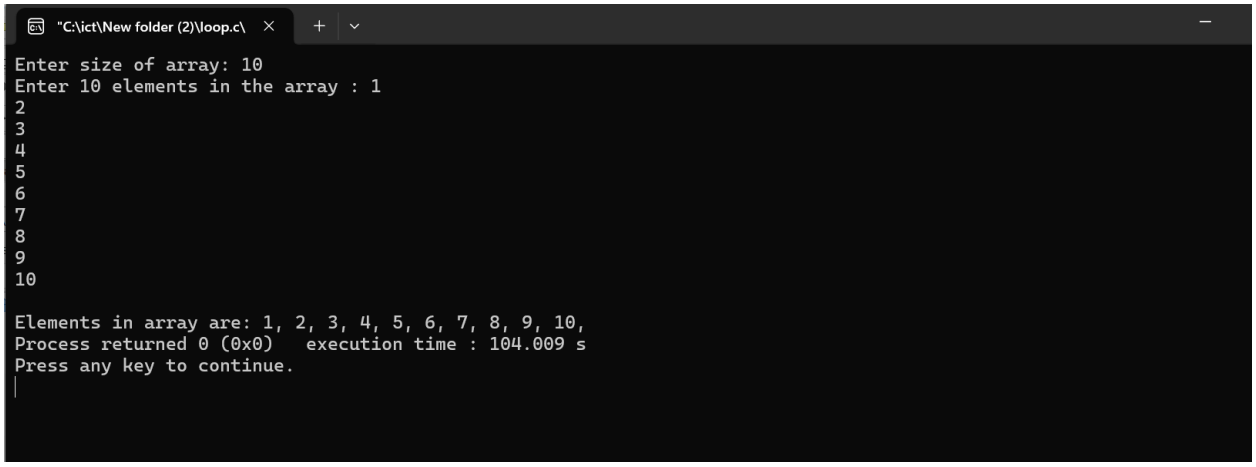
Question 01:

Write a C program to read and print elements of array

Source code:

```
#include <stdio.h>
#define MAX_SIZE 1000
 int main()
 {
 int arr[MAX_SIZE];
 int i, N;
printf("Enter size of array: ");
 scanf("%d", &N);
printf("Enter %d elements in the array : ", N);
 for(i=0; i<N; i++) {
scanf("%d", &arr[i]); }
printf("\nElements in array are: ");
 for(i=0; i<N; i++)
 { printf("%d, ", arr[i]);
 }
 return 0;
}
```

Output:



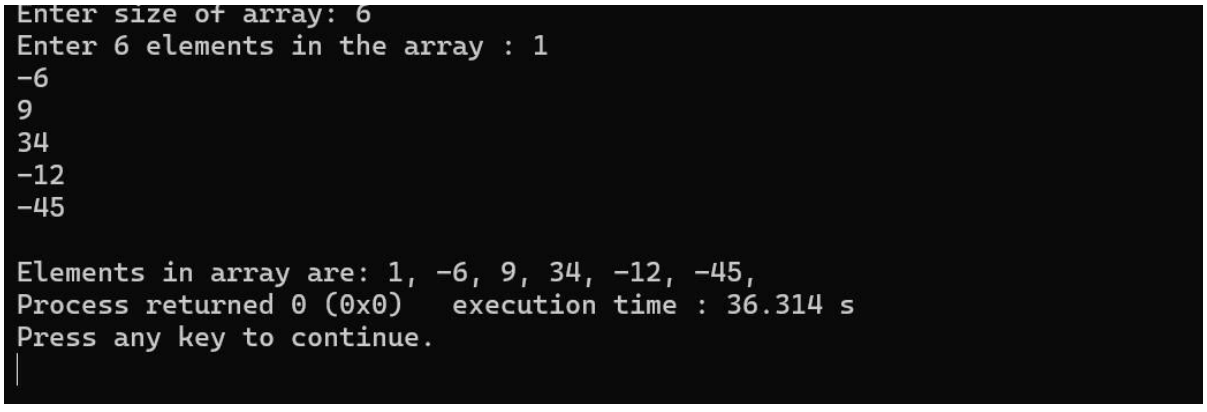
Question 02:

Write a C program to print all negative elements in an array.

Source code:

```
#include <stdio.h>
#define MAX_SIZE 100
int main()
{
   int arr[MAX_SIZE];
   int i, N;
   printf("Enter size of the array : ");
   scanf("%d", &N);
      printf("Enter elements in array : ");
   for(i=0; i<N; i++)
   {
      scanf("%d", &arr[i]);
   }
   printf("\nAll negative elements in array are : ");
   for(i=0; i<N; i++)
   {
      if(arr[i] < 0)
      {
         printf("%d\t", arr[i]);
      }
   }
   return 0;
}
```

Output:



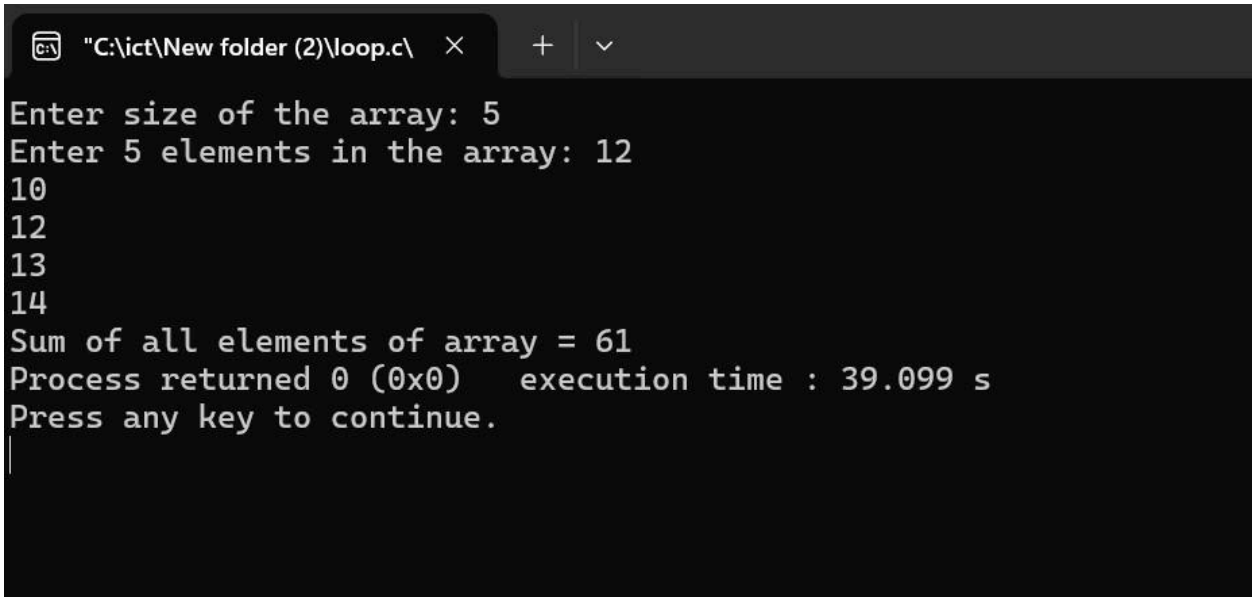
Question 03:

Write a C program to find sum of all array elements.

Source code:

```
#include <stdio.h>
#define MAX_SIZE 100
int main()
{
   int arr[MAX_SIZE];
   int i, n, sum=0;
   printf("Enter size of the array: ");
   scanf("%d", &n);
      printf("Enter %d elements in the array: ", n);
   for(i=0; i<n; i++)
   {
       scanf("%d", &arr[i]);
   }
      for(i=0; i<n; i++)
   {
       sum = sum + arr[i];
   }
   printf("Sum of all elements of array = %d", sum);
   return 0;
}
```

Output:



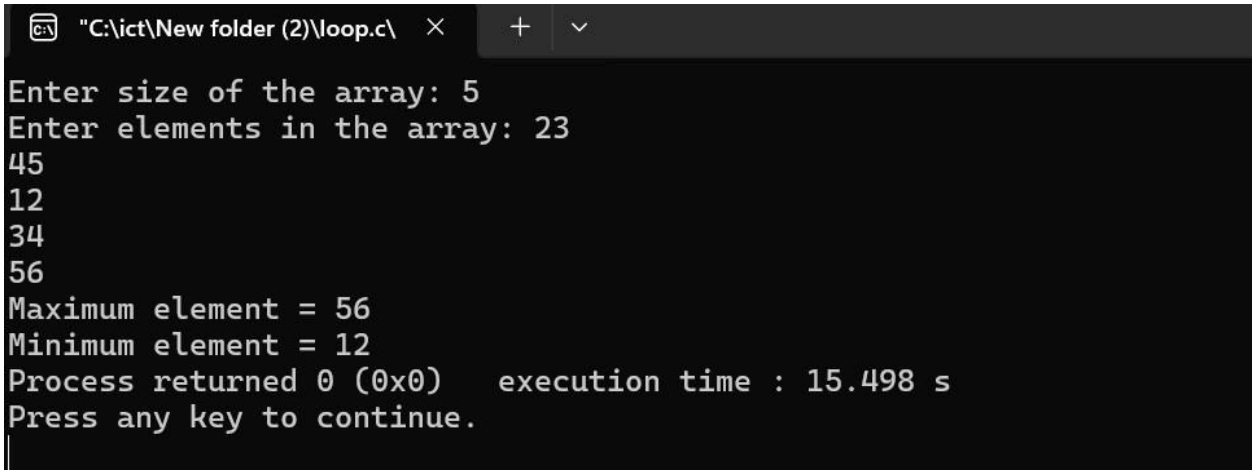
Question 04:

Write a C program to find maximum and minimum element in an array. – using recursion.

Source code:

```
#include <stdio.h>
#define MAX_SIZE 100
int main()
{
   int arr[MAX_SIZE];
   int i, max, min, size;
      printf("Enter size of the array: ");
   scanf("%d", &size);
      printf("Enter elements in the array: ");
   for(i=0; i<size; i++)
   {
      scanf("%d", &arr[i]);
   }
   max = arr[0];
   min = arr[0];
    for(i=1; i<size; i++)
   {
            if(arr[i] > max)
      {
         max = arr[i];
      }
           if(arr[i] < min)
      {
         min = arr[i];
      }
   }
      printf("Maximum element = %d\n", max);
   printf("Minimum element = %d", min);
   return 0;
}
```

Output:



Question 05:

Write a C program to search an element in an array.

Source code:

```
#include <stdio.h>
#define MAX_SIZE 100
int main()
{
   int arr[MAX_SIZE];
   int size, i, toSearch, found;
      printf("Enter size of array: ");
   scanf("%d", &size);
       printf("Enter elements in array: ");
   for(i=0; i<size; i++)
   {
       scanf("%d", &arr[i]);
   }
   printf("\nEnter element to search: ");
   scanf("%d", &toSearch);
   found = 0;

   for(i=0; i<size; i++)
   {
       if(arr[i] == toSearch)
       {
           found = 1;
           break;
```

```
        }
    }
    if(found == 1)
    {
        printf("\n%d is found at position %d", toSearch, i + 1);
    }
    else
    {
        printf("\n%d is not found in the array", toSearch);
    }
    return 0;
}
```

Output: