Problem name: C program to read and print elements of array

Source Code:

```
#include <stdio.h>

int main() {
   int arr[100], n, i;

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

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

   printf("Elements in array are: ");
   for(i = 0; i < n; i++) {
      printf("%d ", arr[i]);
   }

   return 0;
}
```

Input:

```
Enter number of elements: 6
Enter 6 elements: 12 45 7 89 23 56
```

Output:

```
Elements in array are: 12 45 7 89 23 56
```

Problem name: C program to print all negative elements in an array

Source Code:

```
#include <stdio.h>

int main() {
   int arr[100], n, i;

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

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

   printf("All negative elements are: ");
   for(i = 0; i < n; i++) {
      if(arr[i] < 0)
         printf("%d ", arr[i]);
   }

   return 0;
}
```

Input:

```
Enter number of elements: 7
Enter 7 elements: -4 9 0 -12 6 -7 15
```

Output:

```
All negative elements are: -4 -12 -7
```

Problem name: C program to find sum of all array elements

Source Code:

```
#include <stdio.h>

int main() {
   int arr[100], n, i, sum = 0;

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

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

   for(i = 0; i < n; i++) {
      sum += arr[i];
   }

   printf("Sum of all elements = %d", sum);

   return 0;
}
```

Input:

```
Enter number of elements: 5
Enter 5 elements: 8 14 27 6 5
```

Output:

```
Sum of all elements = 60
```

Problem name: C program to find maximum and minimum element in an array

Source Code:

```
#include <stdio.h>

int main() {
   int arr[100];
   int n, i, max, min;

   printf("How many numbers you want to enter: ");
   scanf("%d", &n);

   printf("Enter the numbers: ");
   for(i = 0; i < n; i++) {
      scanf("%d", &arr[i]);
   }

   max = arr[0];
   min = arr[0];

   for(i = 1; i < n; i++) {
      if(arr[i] > max)
         max = arr[i];
      if(arr[i] < min)
         min = arr[i];
   }

   printf("\nLargest value = %d", max);
   printf("\nSmallest value = %d", min);

   return 0;
}
```

Input:

How many numbers you want to enter: 6
Enter the numbers: 12 45 3 78 25 9

Output:

Largest value = 78
Smallest value = 3

Problem name: C program to search an element in array

Source Code:

```
#include <stdio.h>

int main() {
   int arr[100], n, i, search, found = 0;

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

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

   printf("Enter element to search: ");
   scanf("%d", &search);

   for(i = 0; i < n; i++) {
      if(arr[i] == search) {
         found = 1;
         break;
      }
   }

   if(found == 1)
      printf("Element found at position %d", i + 1);
   else
      printf("Element not found");

   return 0;
}
```

Input:

Enter number of elements: 6
Enter 6 elements: 11 25 39 47 58 69
Enter element to search: 47

Output:

Element found at position 4