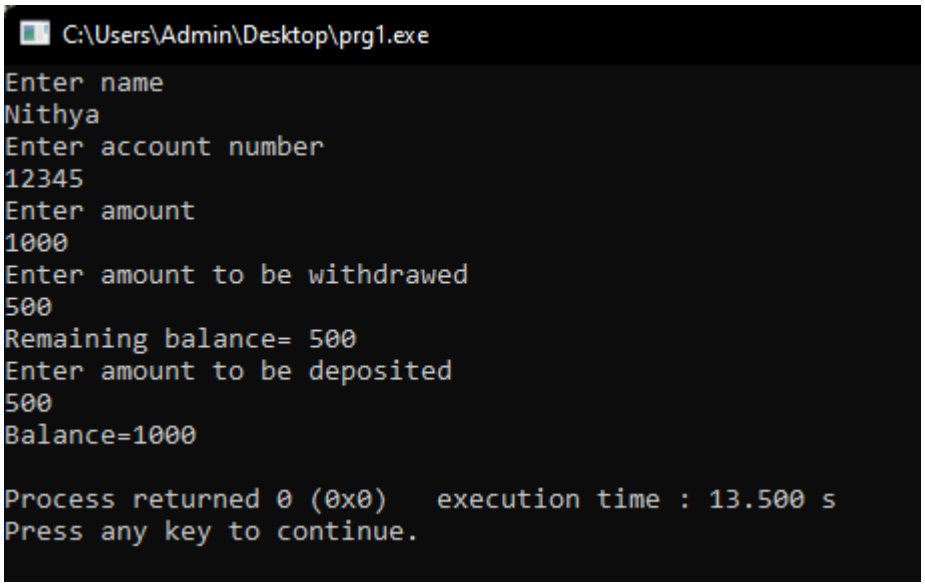
PROGRAM 1

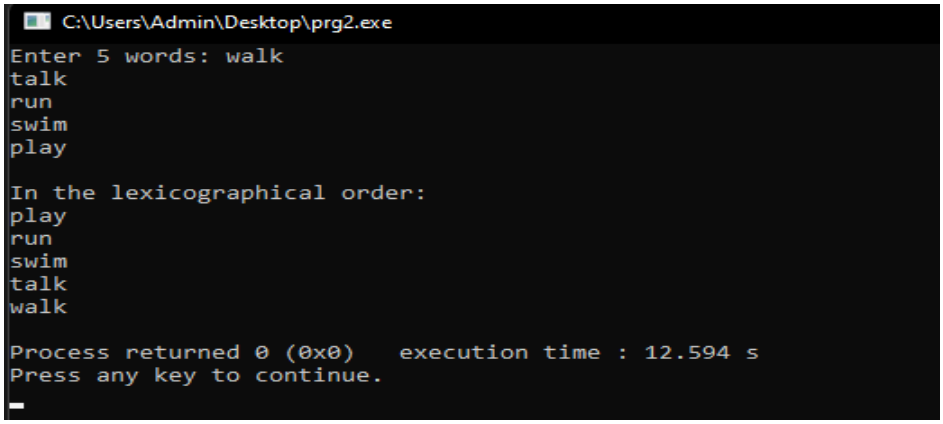
```
#include<stdio.h>
int acc();
int withdrawal();
int deposit(int n);
int main()
{
   int tot;
   acc();
   printf("Enter amount\n");
   scanf("%d",&tot);

   tot= withdrawal(tot);

   deposite(tot);
   return(0);
}
 acc()
 {
  char name[10];
  int num,tot;
  printf("Enter name\n");
  scanf("%s",name);
  printf("Enter account number\n");
  scanf("%d",&num);
 }
 int withdrawal(int n)
 {
  int amt,new_tot;
  printf("Enter amount to be withdrawed\n");
  scanf("%d",&amt);
```

```
  new_tot = n - amt;
  printf("Remaining balance= %d\n",new_tot);
  return(new_tot);

}
int deposite(int n)
{
    int a;
    printf("Enter amount to be deposited\n");
    scanf("%d",&a);
    n=n+a;
    printf("Balance=%d\n",n);

}
```



PROGRAM 2

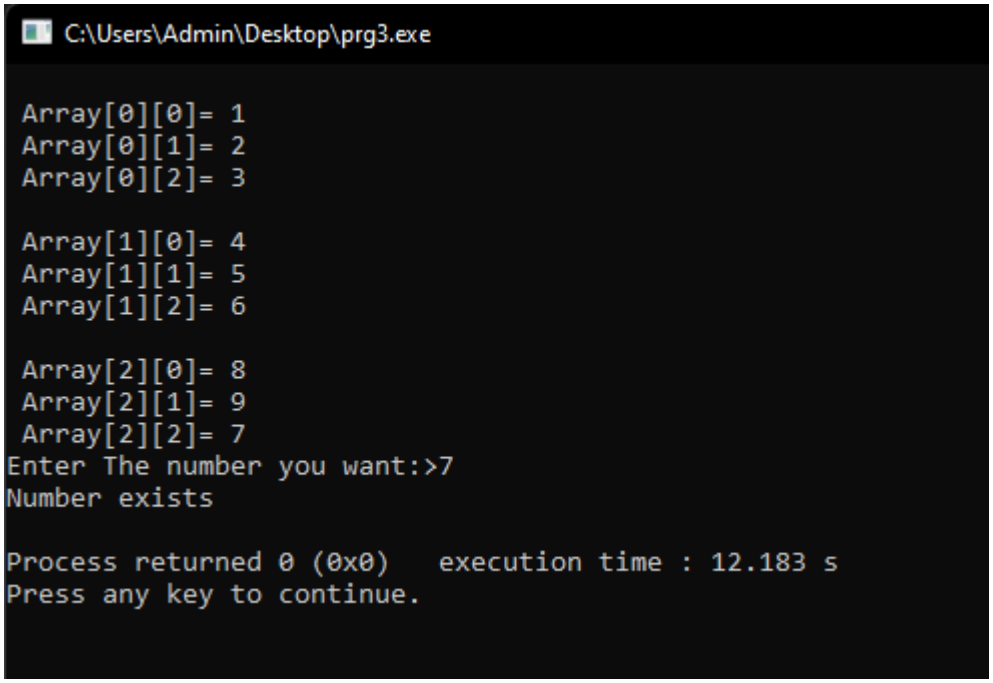
```
#include <stdio.h>
#include <string.h>
int main() {
char str[5][50], temp[50];
printf("Enter 5 words: ");
for (int i = 0; i < 5; ++i) {
fgets(str[i], sizeof(str[i]), stdin);
}
for (int i = 0; i < 5; ++i) {
for (int j = i + 1; j < 5; ++j) {
if (strcmp(str[i], str[j]) > 0) {
strcpy(temp, str[i]);
strcpy(str[i], str[j]);
strcpy(str[j], temp);
}
}
}
printf("\nIn the lexicographical order: \n");
for (int i = 0; i < 5; ++i) {
fputs(str[i], stdout);
}
return 0;
}
```



PROGRAM 3

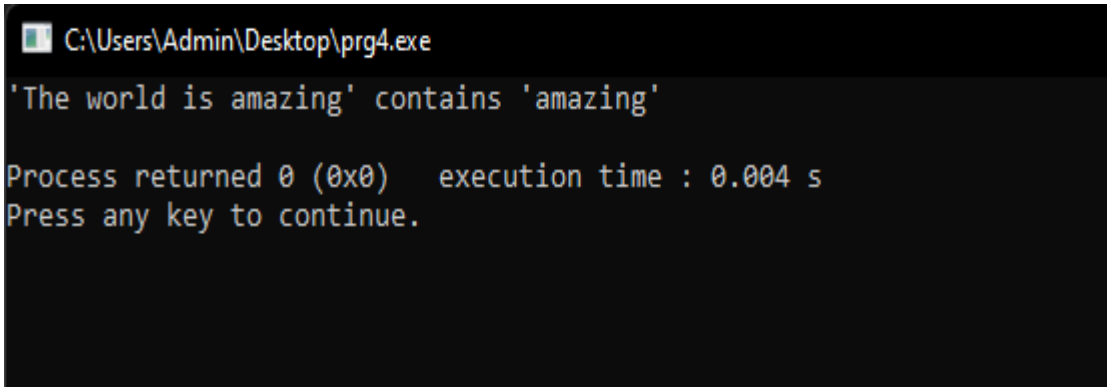
```
#include <stdio.h>
int search(int a[3][3],int x);
int main ()
{
   int Array[3][3]; // array of size 3*3
   int i,j;        //counters i,j
   int result,number;



   for(i=0;i<3;i++)
   {
      printf("\n");
      for(j=0;j<3;j++)
      {
         printf(" Array[%d][%d]= ",i,j);
         scanf("%d", &Array[i][j]);             //Fill The 3*3 array
      }
   }

   printf("Enter The number you want:>");
   scanf("%d",&number);

   result=search(Array,number);

   if(search(Array,number))
      printf("Number exists\n");
   else
     printf("Number does not exists\n");

   return 0;
```

```
}
int search(int a[3][3],int x)
{
   int i,j;
   for(i=0;i<3;i++)
   {

      for(j=0;j<3;j++)
      {

        if (x==a[i][j])
           return 1;

      }
   }
   return 0;
}
```



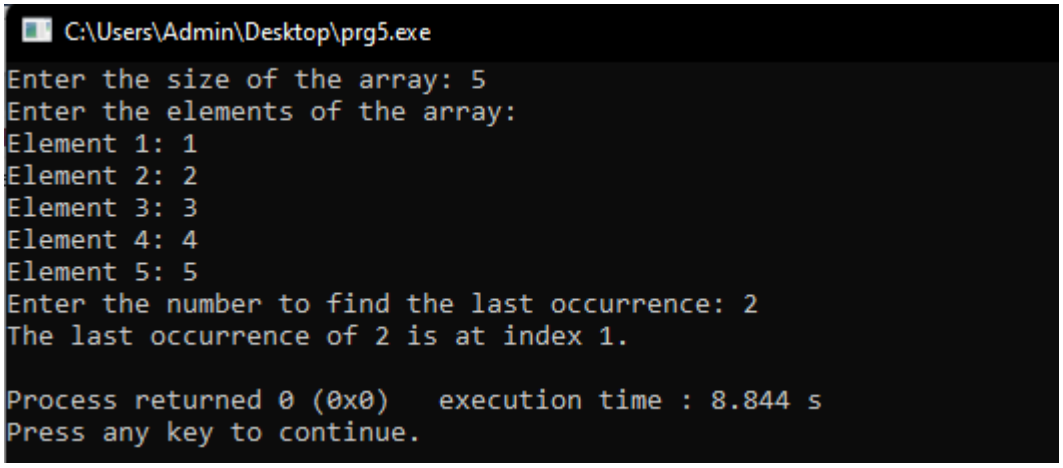
PROGRAM 4

```
#include <stdio.h>
#include <string.h>
int main()
{
char str[] = "The world is amazing";
char search[] = "amazing";
char *ptr = strstr(str, search);
if (ptr != NULL)
{
printf("'%s' contains '%s'\n", str, search);
}
else
{
printf("'%s' doesn't contain '%s'\n", str, search);
}
return 0;
}
```



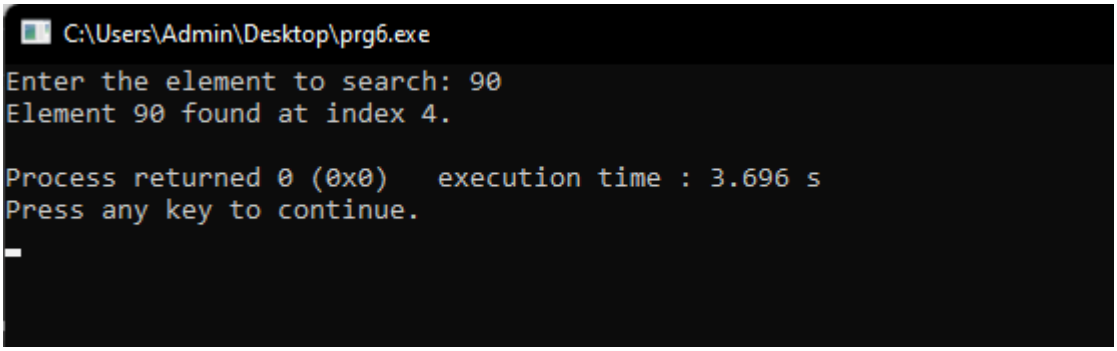
PROGRAM 5

```
#include <stdio.h>
// Function to find the index of the last occurrence of a number in an array
int lastIndex(int arr[], int size, int target) {
   int lastIndex = -1;

   for (int i = size - 1; i >= 0; i--) {
      if (arr[i] == target) {
         lastIndex = i;
         break;
      }
   }

   return lastIndex;
}

int main() {
   int size, target;

   printf("Enter the size of the array: ");
   scanf("%d", &size);


   int arr[size];


   printf("Enter the elements of the array:\n");
   for (int i = 0; i < size; i++) {
      printf("Element %d: ", i + 1);
      scanf("%d", &arr[i]);
   }


   printf("Enter the number to find the last occurrence: ");
   scanf("%d", &target);

   int result = lastIndex(arr, size, target);


   if (result != -1) {
      printf("The last occurrence of %d is at index %d.\n", target, result);
   } else {
      printf("%d not found in the array.\n", target);
   }

   return 0;
}
```


C:\Users\Admin\Desktop\prg5.exe
Enter the size of the array: 5
Enter the elements of the array:
Element 1: 1
Element 2: 2
Element 3: 3
Element 4: 4
Element 5: 5
Enter the number to find the last occurrence: 2
The last occurrence of 2 is at index 1.
Process returned 0 (0x0)   execution time : 8.844 s
Press any key to continue.

PROGRAM 6

```
#include <stdio.h>

int linearSearch(int arr[], int size, int element) { for (int i=0; i< size; i++) {

if (arr[i]== element) {

return i;

}

}

return -1;

}

int main() {

int array[] = {12, 34, 56, 78, 90, 43, 67};

int size = sizeof(array) / sizeof(array[0]);

int searchElement;

printf("Enter the element to search: ");

scanf("%d", &searchElement);

int result = linearSearch(array, size, searchElement);

if (result != -1) {

printf("Element %d found at index %d.\n", searchElement, result);

} else {

printf("Element %d not found in the array.\n", searchElement);
}
return 0;

}
```


C:\Users\Admin\Desktop\prg6.exe
Enter the element to search: 90
Element 90 found at index 4.
Process returned 0 (0x0)   execution time : 3.696 s
Press any key to continue.

PROGRAM 7

```
#include <stdio.h>
void main()
{
int i, n, key, array[100];
printf("Enter number of elements in the array");
scanf("%d", &n);
printf("Enter the array elements");
for(i=0;i< n; i++)
scanf("%d", &array[i]);
printf("Enter value to be searched");
scanf("%d",&key);
for (i=0; i < n; i++)
{
if (array[i]==key)
{printf("%d is present at location %d \n", key, i+1);break;

}
}
if(i==n)
printf("%d isn't present in the array\n",key);
}
```

```
Enter number of elements in the array
6
Enter the array elements
1
4
5
7
8
11
2
Enter value to be searched
5
5 is present at location 2
```

PROGRAM 8

```
#define MAX_SIZE 100
#include <stdio.h>
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;

}
```