1. **Write a program to read and print elements of an array.**

#include <stdio.h>

void main() {

int n, i;

scanf("%d", &n);

int a[n];

for(i = 0; i < n; i++)

scanf("%d", &a[i]);

for(i = 0; i < n; i++)

printf("%d ", a[i]);

}

1. **Write a program to find the sum of elements of an array.**

#include <stdio.h>

void main() {

int n, i, sum = 0;

scanf("%d", &n);

int a[n];

for(i = 0; i < n; i++) {

scanf("%d", &a[i]);

sum += a[i];

}

printf("%d", sum);

}

1. **Write a program to find the maximum and minimum element in an array.**

#include <stdio.h>

void main() {

int n, i;

scanf("%d", &n);

int a[n];

for(i = 0; i < n; i++)

scanf("%d", &a[i]);

int max = a[0], min = a[0];

for(i = 1; i < n; i++) {

if(a[i] > max) max = a[i];

if(a[i] < min) min = a[i];

}

printf("Max: %d Min: %d", max, min);

}

1. **Write a program to reverse an array.**

#include <stdio.h>

void main() {

int n, i;

scanf("%d", &n);

int a[n];

for(i = 0; i < n; i++)

scanf("%d", &a[i]);

for(i = n - 1; i >= 0; i--)

printf("%d ", a[i]);

}

1. **Write a program to search for an element in an array (linear search).**

#include <stdio.h>

void main() {

int n, i, key, found = 0;

scanf("%d", &n);

int a[n];

for(i = 0; i < n; i++)

scanf("%d", &a[i]);

scanf("%d", &key);

for(i = 0; i < n; i++) {

if(a[i] == key) {

found = 1;

break;

}

}

if(found)

printf("Found");

else

printf("Not found");

}

1. **Write a program to sort an array in ascending order.**

#include <stdio.h>

int main() {

int n, i, j, temp;

scanf("%d", &n);

int a[n];

for(i = 0; i < n; i++)

scanf("%d", &a[i]);

for(i = 0; i < n - 1; i++) {

for(j = i + 1; j < n; j++) {

if(a[i] > a[j]) {

temp = a[i];

a[i] = a[j];

a[j] = temp;

}

}

}

for(i = 0; i < n; i++)

printf("%d ", a[i]);

}

1. **Write a program to insert an element in an array.**

#include <stdio.h>

int main() {

int n, pos, val, i;

scanf("%d", &n);

int a[n+1];

for(i = 0; i < n; i++)

scanf("%d", &a[i]);

scanf("%d%d", &pos, &val);

for(i = n; i > pos; i--)

a[i] = a[i-1];

a[pos] = val;

for(i = 0; i <= n; i++)

printf("%d ", a[i]);

}

1. **Write a program to delete an element from an array.**

#include <stdio.h>

int main() {

int n, pos, i;

scanf("%d", &n);

int a[n];

for(i = 0; i < n; i++)

scanf("%d", &a[i]);

scanf("%d", &pos);

for(i = pos; i < n - 1; i++)

a[i] = a[i + 1];

for(i = 0; i < n - 1; i++)

printf("%d ", a[i]);

}

1. **Write a program to find the frequency of elements in an array.**

**#include <stdio.h>**

int main() {

int n, i, j, count;

scanf("%d", &n);

int a[n], freq[n];

for(i = 0; i < n; i++) {

scanf("%d", &a[i]);

freq[i] = -1;

}

for(i = 0; i < n; i++) {

if(freq[i] == -1) {

count = 1;

for(j = i + 1; j < n; j++) {

if(a[i] == a[j]) {

count++;

freq[j] = 0;

}

}

freq[i] = count;

}

}

for(i = 0; i < n; i++) {

if(freq[i] != 0)

printf("%d - %d\n", a[i], freq[i]);

}

}

1. **Write a program to merge two arrays**.

#include <stdio.h>

int main() {

int n1, n2, i;

scanf("%d", &n1);

int a[n1];

for(i = 0; i < n1; i++)

scanf("%d", &a[i]);

scanf("%d", &n2);

int b[n2];

for(i = 0; i < n2; i++)

scanf("%d", &b[i]);

int c[n1 + n2];

for(i = 0; i < n1; i++)

c[i] = a[i];

for(i = 0; i < n2; i++)

c[n1 + i] = b[i];

for(i = 0; i < n1 + n2; i++)

printf("%d ", c[i]);

return 0;

}