1 . Minimum and maximum of the elements of the given array

#include <stdio.h>

int main() {

int n, i, max, min;

printf("Enter the size of the array: ");

scanf("%d", &n);

int arr[n];

printf("Enter the elements of the array: ");

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("The maximum element in the array is %d\n", max);

printf("The minimum element in the array is %d\n", min);

return 0;

}

2 . Remove duplicate element from the array

#include <stdio.h>

int main() {

int size;

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]);

}

int unique[size];

int count = 0;

for (int i = 0; i < size; i++) {

int isDuplicate = 0;

for (int j = 0; j < count; j++) {

if (arr[i] == unique[j]) {

isDuplicate = 1;

break;

}

}

if (!isDuplicate) {

unique[count++] = arr[i];

}

}

printf("Array with duplicates removed: ");

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

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

}

printf("\n");

return 0;

}

3 . Reverse the array

#include <stdio.h>

int main() {

int size;

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]);

}

int start = 0;

int end = size - 1;

while (start < end) {

int temp = arr[start];

arr[start] = arr[end];

arr[end] = temp;

start++;

end--;

}

printf("Reversed array: ");

for (int i = 0; i < size; i++) {

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

}

printf("\n");

return 0;

}

4. Sum and average of the array

#include <stdio.h>

int main() {

int size;

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]);

}

int sum = 0;

for (int i = 0; i < size; i++) {

sum += arr[i];

}

float average = (float)sum / size;

printf("Sum of the array: %d\n", sum);

printf("Average of the array: %.2f\n", average);

return 0;

}

5 . Merge two array

#include <stdio.h>

int main() {

int size1, size2;

printf("Enter the size of the first array: ");

scanf("%d", &size1);

printf("Enter the size of the second array: ");

scanf("%d", &size2);

int arr1[size1];

int arr2[size2];

printf("Enter the elements of the first array:\n");

for (int i = 0; i < size1; i++) {

printf("Element %d: ", i + 1);

scanf("%d", &arr1[i]);

}

printf("Enter the elements of the second array:\n");

for (int i = 0; i < size2; i++) {

printf("Element %d: ", i + 1);

scanf("%d", &arr2[i]);

}

int mergedSize = size1 + size2;

int mergedArray[mergedSize];

for (int i = 0; i < size1; i++) {

mergedArray[i] = arr1[i];

}

for (int i = 0; i < size2; i++) {

mergedArray[size1 + i] = arr2[i];

}

printf("Merged array: ");

for (int i = 0; i < mergedSize; i++) {

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

}

printf("\n");

return 0;

}