1 . Reverse an 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;

}

2 . Remove the duplicate in 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 . Insert the elements at a given position of array

#include <stdio.h>

int main() {

int size, position, element;

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 position where you want to insert the element: ");

scanf("%d", &position);

if (position < 1 || position > size + 1) {

printf("Invalid position!\n");

return 0;

}

printf("Enter the element to be inserted: ");

scanf("%d", &element);

for (int i = size - 1; i >= position - 1; i--) {

arr[i + 1] = arr[i];

}

arr[position - 1] = element;

printf("Array after inserting the element: ");

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 . Minimum and maximum 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 min = arr[0];

int max = arr[0];

for (int i = 1; i < size; i++) {

if (arr[i] < min) {

min = arr[i];

}

if (arr[i] > max) {

max = arr[i];

}

}

printf("Minimum element: %d\n", min);

printf("Maximum element: %d\n", max);

return 0;

}