**//Q1: Write a function in C that takes an array of integers as a parameter and returns the sum of all the elements in 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 result = sumArray(arr, size);

printf("The sum of the elements in the array is: %d\n", result);

return 0;

}

int sumArray(int arr[], int size) {

int sum = 0;

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

sum += arr[i];

}

return sum;

}

**OUTPUT**:

Enter the size of the array: 5

Enter the elements of the array:

Element 1: 23

Element 2: 45

Element 3: 90

Element 4: 87

Element 5: 65

The sum of the elements in the array is: 310

**//Q2:Create a function in C that accepts an array of strings as a parameter and counts the number of strings that start with a specific character**

#include <stdio.h>

#include <string.h>

int countStringsStartingWithChar(char arr[][50], int size, char ch) {

int count = 0;

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

if (arr[i][0] == ch) {

count++;

}

}

return count;

}

int main() {

int size;

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

scanf("%d", &size);

char arr[size][50];

printf("Enter the strings in the array:\n");

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

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

scanf("%s", arr[i]);

}

char ch;

printf("Enter the character to search for: ");

scanf(" %c", &ch);

int result = countStringsStartingWithChar(arr, size, ch);

printf("The number of strings starting with '%c' is: %d\n", ch, result);

return 0;

}

**Output**

Enter the size of the array: 5

Enter the strings in the array:

String 1: mohammad

String 2: faiz

String 3: vivek

String 4: jass

String 5: manas

Enter the character to search for: m

The number of strings starting with 'm' is: 2

**//Q3. Implement a function in C that receives an array of floating-point numbers as a parameter and finds the average of all the elements in the array.**

#include <stdio.h>

float calculateAverage(float arr[], int size) {

float sum = 0;

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

sum += arr[i];

}

return sum / size;

}

int main() {

int size;

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

scanf("%d", &size);

float arr[size];

printf("Enter the floating-point numbers in the array:\n");

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

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

scanf("%f", &arr[i]);

}

float average = calculateAverage(arr, size);

printf("The average of the numbers is: %.2f\n", average);

return 0;

}

**OUTPUT:**

Enter the size of the array: 10

Enter the floating-point numbers in the array:

Number 1: 1

Number 2: 2

Number 3: 4

Number 4: 3

Number 5: 5

Number 6: 6

Number 7: 7

Number 8: 8

Number 9: 9

Number 10: 10

The average of the numbers is: 5.50