1.

1.1 #include <stdio.h>

int main() {

int array[10]; // Declare an array with 10 elements

int i;

// Input values to the array

printf("Enter 10 integer values:\n");

for (i = 0; i < 10; i++) {

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

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

}

// Find the minimum value

int min\_value = array[0]; // Assume the first element is the minimum

for (i = 1; i < 10; i++) {

if (array[i] < min\_value) {

min\_value = array[i];

}

}

// Output the minimum value

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

return 0;

}

1.2 #include <stdio.h>

int main() {

int array[10]; // Declare an array with 10 elements

int i;

// Input values to the array

printf("Enter 10 integer values:\n");

for (i = 0; i < 10; i++) {

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

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

}

// Find the maximum value

int max\_value = array[0]; // Assume the first element is the maximum

for (i = 1; i < 10; i++) {

if (array[i] > max\_value) {

max\_value = array[i];

}

}

// Output the maximum value

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

return 0;

}

1.3 #include <stdio.h>

int main() {

int array[10]; // Declare an array with 10 elements

int i;

int sum = 0;

// Input values to the array

printf("Enter 10 integer values:\n");

for (i = 0; i < 10; i++) {

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

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

sum += array[i];

}

// Calculate the average value

float average\_value = (float)sum / 10;

// Output the average value

printf("Average value: %.2f\n", average\_value);

return 0;

}

1.4 #include <stdio.h>

int main() {

int array[10]; // Declare an array with 10 elements

int i;

// Input values to the array

printf("Enter 10 integer values:\n");

for (i = 0; i < 10; i++) {

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

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

}

// Output the values in reverse order

printf("Values in reverse order: ");

for (i = 9; i >= 0; i--) {

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

}

printf("\n");

return 0;

}

02. #include <stdio.h>

int main() {

int size;

// Input size for arrays

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

scanf("%d", &size);

// Declare three arrays with the given size

int array1[size];

int array2[size];

int vector\_sum[size];

int i;

int scalar\_sum1 = 0;

int scalar\_sum2 = 0;

// Input values for array1

printf("Enter %d integer values for array1:\n", size);

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

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

scanf("%d", &array1[i]);

scalar\_sum1 += array1[i];

}

// Input values for array2

printf("Enter %d integer values for array2:\n", size);

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

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

scanf("%d", &array2[i]);

scalar\_sum2 += array2[i];

}

// Calculate the vector sum and store it in the third array

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

vector\_sum[i] = array1[i] + array2[i];

}

// Output the scalar sums of both arrays

printf("Scalar Sum of array1: %d\n", scalar\_sum1);

printf("Scalar Sum of array2: %d\n", scalar\_sum2);

// Output the vector sum array

printf("Vector Sum:\n");

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

printf("%d ", vector\_sum[i]);

}

printf("\n");

return 0;

}