

Q1.

```
#include<stdio.h>
int main()
{
    int arr[10],i,max,min,sum=0;
    float avg;

    for(i=0;i<10;i++)
    {
        printf("Enter %d number: ",i+1);
        scanf("%d",&arr[i]);
        sum=sum+arr[i];
    }
    min=arr[0];
    max=arr[0];

    for(i=0;i<10;i++){
        if (arr[i]<min)
            min=arr[i];
        if(arr[i]>max)
            max=arr[i];
    }

    printf("Minimum value is %d\n",min);
    printf("Maxiimum Value is %d\n",max);
    avg=(float)sum/10;
    printf("Average value is %.2f\n",avg);

    printf("Reverse order of values:\n");
    for(i=9;i>=0;i--)
    {
        printf("%d \n",arr[i]);
    }
}
```

Q2. Part1

```
#include <stdio.h>

void getArrayInput(int arr[], int size) {
    printf("Enter %d elements for the array:\n", size);
    for (int i = 0; i < size; i++) {
        printf("Enter element %d: ", i + 1);
        scanf("%d", &arr[i]);
    }
}

int scalarSum(int arr[], int size) {
    int sum = 0;
    for (int i = 0; i < size; i++) {
        sum += arr[i];
    }
    return sum;
}

int main() {
    int size1, size2;

    printf("Enter the size of the first array: ");
    scanf("%d", &size1);
    int array1[size1];
    getArrayInput(array1, size1);

    printf("Enter the size of the second array: ");
    scanf("%d", &size2);
    int array2[size2];
    getArrayInput(array2, size2);

    int sumArray1 = scalarSum(array1, size1);
    int sumArray2 = scalarSum(array2, size2);

    printf("Scalar Sum of the first array: %d\n", sumArray1);
    printf("Scalar Sum of the second array: %d\n", sumArray2);
}
```

Part2

```
#include <stdio.h>

void getArrayFromUser(float array[], int size) {
    printf("Enter %d elements:\n", size);
    for (int i = 0; i < size; i++) {
        scanf("%f", &array[i]);
    }
}

void vectorSum(float arr1[], float arr2[], float result[], int size) {
    for (int i = 0; i < size; i++) {
        result[i] = arr1[i] + arr2[i];
    }
}

int main() {
    int size;

    printf("Enter the size of the arrays: ");
    scanf("%d", &size);

    if (size <= 0) {
        printf("Size must be a positive integer.\n");
        return 1;
    }

    float array1[size], array2[size], vectorSumArray[size];

    printf("Enter elements for the first array:\n");
    getArrayFromUser(array1, size);

    printf("Enter elements for the second array:\n");
    getArrayFromUser(array2, size);

    vectorSum(array1, array2, vectorSumArray, size);

    printf("\nFirst Array: ");
    for (int i = 0; i < size; i++) {
        printf("%.2f ", array1[i]);
    }
}
```

```
printf("\nSecond Array: ");  
for (int i = 0; i < size; i++) {  
    printf("%.2f ", array2[i]);  
}  
  
printf("\nVector Sum Array: ");  
for (int i = 0; i < size; i++) {  
    printf("%.2f ", vectorSumArray[i]);  
}  
  
printf("\n");  
}
```