Question-1:

#include <stdio.h>

int main() {

int arr[100];

int n, i;

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

scanf("%d", &n);

printf("Enter %d elements:\n", n);

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

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

}

printf("Elements stored in the array are:\n");

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

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

}

printf("\n");

return 0;

}

Question -2:

#include <stdio.h>

int main() {

int arr[100];

int n, i;

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

scanf("%d", &n);

printf("Enter %d elements:\n", n);

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

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

}

printf("Elements in reverse order:\n");

for (i = n - 1; i >= 0; i--) {

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

}

printf("\n");

return 0;

}

Question -3:

#include <stdio.h>

int main() {

int arr[100];

int n, i, sum = 0;

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

scanf("%d", &n);

printf("Enter %d elements:\n", n);

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

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

}

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

sum += arr[i];

}

printf("Sum of all elements: %d\n", sum);

return 0;

}

Question - 4:

#include <stdio.h>

int main() {

int arr[100];

int n, i, j, count = 0;

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

scanf("%d", &n);

printf("Enter %d elements:\n", n);

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

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

}

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

for (j = i + 1; j < n; j++) {

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

count++;

break;

}

}

}

printf("Total number of duplicate elements: %d\n", count);

return 0;

}

Question - 5:

#include <stdio.h>

int main() {

int arr[100];

int n, i, j;

int isUnique;

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

scanf("%d", &n);

printf("Enter %d elements:\n", n);

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

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

}

printf("Unique elements in the array: ");

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

isUnique = 1;

for (j = 0; j < n; j++) {

if (i != j && arr[i] == arr[j]) {

isUnique = 0;

break;

}

}

if (isUnique) {

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

}

}

printf("\n");

return 0;

}

Question - 6:

#include <stdio.h>

int main() {

int arr[100];

int n, i, pos, value;

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

scanf("%d", &n);

printf("Enter %d elements:\n", n);

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

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

}

printf("Enter the position to insert the element: ");

scanf("%d", &pos);

printf("Enter the value to insert: ");

scanf("%d", &value);

for (i = n; i >= pos; i--) {

arr[i] = arr[i - 1];

}

arr[pos - 1] = value;

n++;

printf("Array after insertion:\n");

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

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

}

printf("\n");

return 0;

}

Question - 7:

#include <stdio.h>

int main() {

int arr[100];

int n, i, index;

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

scanf("%d", &n);

printf("Enter %d elements:\n", n);

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

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

}

printf("Enter the index of the element to delete: ");

scanf("%d", &index);

if (index < 0 || index >= n) {

printf("Invalid index!\n");

return 1;

}

for (i = index; i < n - 1; i++) {

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

}

n--;

printf("Array after deletion:\n");

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

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

}

printf("\n");

return 0;

}