**Linear Search:**

#include <stdio.h>

int linearSearch(int array[], int size, int data) {

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

if (array[i] == data) {

return i; // Return the index where the element is found

}

}

return -1; // Return -1 if the element is not found

}

int main() {

int array[] = {22, 54, 2, 11, 32, 98, 41, 22};

int size = sizeof(array) / sizeof(array[0]);

int data = 98;

int result = linearSearch(array, size, data);

if (result != -1) {

printf("The data %d is found at index %d\n", data, result);

} else {

printf("The given data %d is not found\n", data);

}

return 0;

}

**Binary Search**

// Binary Search in C

#include <stdio.h>

int binarySearch(int array[], int x, int low, int high) {

// Repeat until the pointers low and high meet each other

while (low <= high) {

int mid = low + (high - low) / 2;

if (x == array[mid])

return mid;

if (x > array[mid])

low = mid + 1;

else

high = mid - 1;

}

return -1;

}

int main(void) {

int array[] = {3, 4, 5, 6, 7, 8, 9};

int n = sizeof(array) / sizeof(array[0]);

int x = 4;

int result = binarySearch(array, x, 0, n - 1);

if (result == -1)

printf("Not found");

else

printf("Element is found at index %d", result);

return 0;

}