# Binary Search

Shivani S – 192471030

#include <stdio.h>

int main() {

int arr[100], n, i, key, low, high, mid, found = 0;

printf("Enter number of elements: ");

scanf("%d", &n);

printf("Enter elements in sorted order:\n");

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

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

}

printf("Enter element to search: ");

scanf("%d", &key);

low = 0;

high = n - 1;

while (low <= high) {

mid = (low + high) / 2;

if (arr[mid] == key) {

printf("Element %d found at position %d\n", key, mid);

found = 1;

break;

} else if (arr[mid] < key) {

low = mid + 1;

} else {

high = mid - 1;

}

}

if (!found) {

printf("Element %d not found in the array\n", key);

}

return 0;

}

