```
C add.c
               C day33.c X C reverse.c
                                               C table.c
                                                                               C break.c
                                                                                               C fact.c
                                                                                                                               C oh.c
                                                                                                                                               C odd.c
                                                                                                                                                               C oood.c
      #include <stdio.h>
      int main() {
          int n;
          printf("Enter the number of elements: ");
          scanf("%d", &n);
          int arr[n];
          printf("Enter %d sorted elements:\n", n);
          for (int i = 0; i < n; i++) {
              scanf("%d", &arr[i]);
          int key;
          printf("Enter the element to search: ");
          scanf("%d", &key);
          int low = 0, high = n - 1, mid;
          int index = -1; // default: not found
          while (low <= high) {
              mid = (low + high) / 2;
              if (arr[mid] == key) {
                  index = mid;
              else if (arr[mid] < key) {</pre>
PS C:\Users\ACER\Desktop\itscbe> gcc day33.c
PS C:\Users\ACER\Desktop\itscbe> ./a.exe
Enter the number of elements: 4
Enter 4 sorted elements:
3 5
Enter the element to search: 5
Found at index 1
PS C:\Users\ACER\Desktop\itscbe>
```

```
C 33.c
           X C reverse.c
                                C table.c
                                                C dobydo
                                                                 C break.c
                                                                                 C fact.c
                                                                                                 C nam.c
                                                                                                                  C oh.c
                                                                                                                                  C odd.c
                                                                                                                                                   C oood.c
                                                                                                                                                                   C lp.c
      int main() {
    for (int 1 = 0; 1 < n; 1++) {</pre>
           int key:
           printf("Enter the element to insert: ");
           scanf("%d", &key);
           int i;
           for (i = n - 1; (i >= 0 && arr[i] > key); i--) {
               arr[i + 1] = arr[i]; // shift elements to right
           arr[i + 1] = key; // insert key
           printf("Array after insertion:\n");
           for (i = 0; i \le n; i++) {
              printf("%d ", arr[i]);
          printf("\n");
          return 0;
```

```
PS C:\Users\ACER\Desktop\itscbe> ./a.exe
Enter the number of elements: 3
Enter 3 sorted elements: 2
3
4
Enter the element to insert: 3
Array after insertion: 2 3 3 4
PS C:\Users\ACER\Desktop\itscbe>
```