**package** com;

**public** **class** binary {

**public** **static** **void** binarySearch(**int** arr[], **int** first, **int** last, **int** key){

**int** mid = (first + last)/2;

**while**( first <= last ){

**if** ( arr[mid] < key ){

first = mid + 1;

}**else** **if** ( arr[mid] == key ){

System.***out***.println("Element is found at index: " + mid);

**break**;

}**else**{

last = mid - 1;

}

mid = (first + last)/2;

}

**if** ( first > last ){

System.***out***.println("Element is not found!");

}

}

**public** **static** **void** main(String args[]){

**int** arr[] = {4,8,9,56,34};

**int** key = 56;

**int** last=arr.length-1;

*binarySearch*(arr,0,last,key);

}

}