**package** Question2;

**class** BinarySearch

{

**int** binarySearch(**int** arr[], **int** x)

{

**int** l = 0, r = arr.length - 1;

**while** (l <= r)

{

**int** m = l + (r-l)/2;

**if** (arr[m] == x)

**return** m;

**if** (arr[m] < x)

l = m + 1;

**else**

r = m - 1;

}

**return** -1;

}

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

{

BinarySearch ob = **new** BinarySearch();

**int** arr[] = {2, 3, 4, 10, 40};

**int** n = arr.length;

**int** x = 10;

**int** result = ob.binarySearch(arr, x);

**if** (result == -1)

System.***out***.println("Element not present");

**else**

System.***out***.println("Element found at " + "index " + result);

}

}