# Phase 1 Practice Project – Assisted Practice

**1 . Write a program in java implementing the linear search algorithm**

**package** algorithms;

**public** **class** LinearSearch {

**public** **static** **int** linearSearch(**int**[] arr, **int** target) {

**for** (**int** i = 0; i < arr.length; i++) {

**if** (arr[i] == target) {

**return** i; // Element found, return its index

}

}

**return** -1; // Element not found in the array

}

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

**int**[] arr = {9, 13, 32, 21, 46, 5, 60};

**int** target = 32;

**int** index = *linearSearch*(arr, target);

**if** (index != -1) {

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

} **else** {

System.***out***.println("Element " + target + " not found in the array.");

}

}

}

# OUTPUT:

