# Phase 1 Practice Project – Assisted Practice

**4. Write a program in java implementing the Selection sort algorithm**

**package** algorithms;

**public** **class** SelectionSort {

**public** **static** **void** selectionSort(**int**[] arr) {

**int** n = arr.length;

**for** (**int** i = 0; i < n - 1; i++) {

**int** minIndex = i;

// Find the index of the minimum element in the unsorted part of the array

**for** (**int** j = i + 1; j < n; j++) {

**if** (arr[j] < arr[minIndex]) {

minIndex = j;

}

}

// Swap the minimum element with the first element of the unsorted part

**int** temp = arr[i];

arr[i] = arr[minIndex];

arr[minIndex] = temp;

}

}

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

**int**[] arr = {69, 45, 32, 2,82, 91};

*selectionSort*(arr);

System.***out***.println("Sorted array:");

**for** (**int** i : arr) {

System.***out***.print(i + " ");

}

}

}

# OUTPUT:

