

```
public class sorting_algorithms_handout
{
    public static void main(String[] args)
    {
        int[] nums1 = {3, 6, 5, 1, 9, 2, 4, 0, 8, 7};
        selectionSort(nums1);
    }

    public static void selectionSort(int[] arr)
    {
        for (int i = 0; i < arr.length - 1; i++)
        {
            int minIndex = i;
            int min = arr[minIndex];

            for (int j = i + 1; j < arr.length; j++)
            {
                if (arr[j] < min)
                {
                    minIndex = j;
                    min = arr[minIndex];
                }
            }

            int temp = arr[minIndex];      // swap
            arr[minIndex] = arr[i];
            arr[i] = temp;
        }
    }
}
```

$$\underline{i} \quad \underline{\text{minIndex}} \quad \underline{\text{min}} \quad \underline{j}$$
[illegible]