**Q1. Write a program to sort an array in descending order using bubble sort.**

**Input Array {3,5,1,6,0}**

**Output Array: {6, 5, 3, 1, 0}**

import java.util.Arrays;

public class fundNum{

    public static void bubbleSort(int nums[]){

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

            for(int j =i+1;j<nums.length-1;j++){

                if(nums[i]<nums[j]){

                    int temp = nums[i];

                    nums[i] = nums[j];

                    nums[j] = temp;

                }

            }

        }

    }

    public static void main(String[] args) {

        int nums[] ={3,5,1,6,0};

        bubbleSort(nums);

        System.out.println(Arrays.toString(nums));

    }

}

**Q2. WAP to sort an array in descending order using selection sort**

**Input Array {3,5,1,6,0}**

**Output Array: {6, 5, 3, 1, 0}**

import java.util.Arrays;

public class fundNum{

    public static void bubbleSort(int nums[]){

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

            int min\_idx = i;

            for(int j =i+1;j<nums.length;j++){

                if(nums[j]>nums[min\_idx]){

                    min\_idx = j;

                }

                }

                if(min\_idx != i){

                    int temp = nums[i];

                    nums[i] = nums[min\_idx];

                    nums[min\_idx] = temp;

                }

            }

        }

    public static void main(String[] args) {

        int nums[] ={3,5,1,6,0};

        bubbleSort(nums);

        System.out.println(Arrays.toString(nums));

    }

}

**Q3. WAP to sort an array in decreasing order using insertion sort**

**Input Array {3,5,1,6,0}**

**Output Array: {6, 5, 3, 1, 0}**

import java.util.Arrays;

public class fundNum{

    public static void bubbleSort(int nums[]){

        for(int i = 0;i<nums.length-1;i++){

            int j =i+1;

            while(j>0 && nums[j]>nums[j-1]){

                int temp = nums[j];

                nums[j] = nums[j-1];

                nums[j-1] = temp;

                j--;

            }

            }

        }

    public static void main(String[] args) {

        int nums[] ={3,5,1,6,0};

        bubbleSort(nums);

        System.out.println(Arrays.toString(nums));

    }

}

**Q4. Find out how many pass would be required to sort the following array in decreasing order**

**using bubble sort**

**Input Array {3,5,1,6,0}**

* Three iterations are required to sort this array in decreasing order using bubble sort.

**Q5. Find out the number of iterations to sort the array in descending order using selection sort.**

**Input Array {3,5,1,6,0}**

* Three iterations are required to sort this array in decending order using selection sort.