

2.1 Insertion Sort

Write a program `insertion_sort.cpp` OR `insertion_sort.py` that implements and demonstrates the insertion sort pseudocode on page 18. Include only one source code to be graded in your folder. WARNING: If both exist, I will grade the first source file I see.

Specifications: Code and utilize the following functions:

Listing 1: print vector

```
/*
 * print_vector(v) for insertion_sort.cpp ONLY
 * takes integer vector v as a const reference parameter
 * Prints the contents of vector v.
 * v is not modified
 */
```

Listing 2: insertion sort

```
/*
 * insertion_sort(A)
 * takes integer vector (in .cpp) or list (in .py) A as a reference parameter
 * A is the vector/list to sort
 * A IS modified
 */
```

Listing 3: main

```
/*
 * main()
 * Demonstrate insertion_sort(A)
 */
```

Listing 4: insertion sort example run

The vector to be sorted: {5,2,4,6,1,3,4,2,22,1}

The vector after insertion sort: {1,1,2,2,3,4,4,5,6,22}
