

PROGRAMMING EXERCISE 7 (Insertion Sort)

The following is an insertion sort algorithm that sorts values in an array `data`.

```
FOR j=2 TO array_size STEP 1
    i = j - 1
    temp = data(j)
    DOWHILE (i ≥ 1) AND (temp < data(i))
        data(i+1) = data(i)
        i=i-1
    ENDDO
    data(i+1) = temp
ENDFOR
```

Task 1

Write program code for this algorithm and follow good programming practice. Use the sample array data `WOOD` available from text file `WOOD+PIE.txt` and paste this into your programming code.

Evidence 1: Your program code. [7]

Evidence 2: One screenshot showing the output for running the program code for array `WOOD`. [2]

Task 2

Re-design the program code to have a procedure `InsertionSort`, which has a parameter that can be used for any array of string data.

Use the data provided in the array `PIE`.

Evidence 3: Your amended program code. [4]

Evidence 4: One screenshot showing the output for running the program code for array `PIE`. [2]