**PreLab #5**

**SINGLY-LINKED LIST SORTING**

**Group #28**

**Group Names: Jacob Dorpinghaus, Benjarit Hotrabhavananda**

1. What does the “INCLUDE NUTS.DAT ” do?

* It will allow us use the macro that contained in NUTS.DAT

2. Is NUTS in data segment necessary? Why?

* Yes, because this is a data macro that works just like if we would declare those variables in the data segment, so if we don’t state NUTS in data segment then those variables in NUTS will not be allocated in data segment.

3. What is the size of the Code, Stack and Data segments? Can you tell the start and end addresses for

each?

* Since the .MODEL is Medium, the size of Code segment can exceed 64KB and Data segment must be fit into 64KB and Stack is 100 bytes of size. Yes, we can tell the start and end addresses by looking at each correspond registers. code segment: CS register, data segment: DS register, stack segment: SS register. And to get end addresses just add FFFFH.

4. If we removed the Entry for PEC in NUTS MACRO, will your answer change? Explain. (Refer to the Appendix: DATA MACRO)

* Yes, it will change. If we removed the Entry for PEC, the list will be cut and left with only two strings to be sorted.

5. Why does ALM entry in NUTS MACRO have a value of 0?

* That node is the last node in the linked-list so that pointer does not point to anything so set to 0.