Russell Andlauer

Assignment #7

5.1) Given the instructions ADD, JMP, LEA, and NOT, identify the instruction type and the addressing mode that can be used with the instruction.

ADD🡪 operate instructions, register addressing

JMP🡪 control instruction, immediate addressing

LEA🡪 data movement instruction, immediate addressing

NOT🡪 operate instruction, register addressing

5.2) A memory’s addressability is 64 bits. What does that tell you about the size of the MAR and MDR?

The MDR is 64 bits, each value from the memory is stored in the Memory Data Register so it has to be the same size as each value.

The size of the MAR is not able to be determined from this information.