|  |  |
| --- | --- |
| **Names:** | **Group #:** |
| 1. | 6. |
| 2. | 7. |
| 3. | 8. |
| 4. | 9. |
| 5. | 10. |

Answer the following questions using the code provided in class. For any lines that would generate an error – enter “error” for the output to EAX and then ignore that line for further calculations.

1. Fill in the following table to show the Hexadecimal value stored into each byte by an x86 processor (little-endian). Mark any byte that isn’t set by the .data segment with two question marks “??”. Then use this table to answer the questions that follow: (40 pts)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Offset | +0 | +1 | +2 | +3 |
| 0x0000 | 65 | 87 | 34 | 12 |
| 0x0004 | 55 | 44 | 33 | 22 |
| 0x0008 | 21 | 34 | 98 | 56 |
| 0x000C | 62 | 45 | 98 | 76 |
| 0x0010 | 65 | 44 | ?? | ?? |

|  |  |
| --- | --- |
| 1. What is the offset (in hex) for myVal1? (5 pts) | 0x0000 |
| 1. What is the offset (in hex) for myVal2? (5 pts) | 0x0000 |
| 1. What is the offset (in hex) for myVal3? (5 pts) | 0x0008 |
| 1. What is the offset (in hex) for myVal4? (5 pts) | 0x0008 |
| 1. What is the offset (in hex) for bArray? (5 pts) | 0x000E |
| 1. What is the value stored in EAX **after** the execution of line #007? (5 pts) | 45625698 |
| 1. What is the value stored in EAX **after** the execution of line #008? (5 pts) | 45625644 |
| 1. What is the value stored in EAX **after** the execution of line #009? (5 pts) | ERROR cant move WORD to a ah of size 1 byte |
| 1. What is the value stored in EAX **after** the execution of line #010? (5 pts) | 45621234 |
| 1. What is the value stored in EAX **after** the execution of line #011? (5 pts) | 44657698 |
| 1. What is the value stored in EAX **after** the execution of line #012? (5 pts) | 44652198 |