

## Lab #4 - Endianness

### Objectives

Let's practice a little about Endianness. You can read more about this [here](#) or if you like watching a video, then check this [video](#).

### Part #1 - Quiz Instructions

Please answer all of the given questions.

**Q1) Assume we have the following value:**

A0 B0 C0 D0

**How will this be stored in Little-endian?**

1. ABCD0000
2. B0 A0 D0 C0
3. D0 B0 C0 A0
4. D0 C0 B0 A0

**Q2) If we have the value 78563412 represented in little-endian, that means in big-endian, it should be 12345678.**

1. True
2. False

**Q3) Assume we have the following value:**

BAADBEEF

**How will this be stored in Little-endian?**

1. EFBEADBA
2. BEEFBAAD
3. ADBAEFBE
4. BAADBEEF

**Q4) Endianness is a term used to describe how a sequence of bytes are stored in memory. Little-endian is an order in which the most significant value in the sequence of bytes is stored first, while Big-endian uses the least significant value first.**

1. True
2. False

**Q5) Assume we have the following memory addresses:**

0x1000

0x1004

0x1008

0x100C

**If we are to store the value "BEEFBAAD" in little-endian in the memory addresses above. What would be stored in each address? Explain your answer in detail.**

**Part #2 – Please reflect on what you learned from this lab**