ESE 345 Programming Assignment

Due Sunday, September 26

Part I (1 point)

- Create a MIPS **function** to compute the least common multiple (LCM) between two numbers
  - Ex: the least common multiple between 10 and 15 is 30
- You **must** use the programming conventions discussed in class for functions
- Assume that all inputs are **unsigned**, and LCM will not overflow

Part II (1 point)

- Assume you have 3 arrays of words: A, B, and C (referenced by $s0, $s1, and $s2 respectively)
- Using the function from Part I, let `C[i] = LCM(A[i], B[i])`
- Exit the program when `A[i]` or `B[i]` is zero

Pseudo-code:

```
int i = 0;
while ((A[i] != 0) && (B[i] != 0))
{
      C[i] = LCM(A[i], B[i]);
}
```

Pseudo-instructions **MAY NOT** be used

Avoid using multiply/divide instructions, if possible

For simplicity, delayed branching should be **DISABLED**