**Problems**:

1. (3 min) Convert these integers from decimal notation to binary notation. (Textbook [KR] Page 229: 1 a & b)
   1. 231.
   2. 4532.
2. (2 min) Convert these integers from hexadecimal notation to binary notation. (Textbook [KR] Page 229: 5 a & b)
   1. 80E.
   2. 135AB.
3. (10 min)Use *Algorithm 5* to find 7644 mod 645. (Textbook [KR] Page 230: 19, hint: Page 226-227)
4. (10 min)Use the Euclidean algorithm to find: (Textbook [KR] Page 230: 23 e & f)
   1. gcd(1000,5040).
   2. gcd(9888,6060).
5. (10 min)Multiply (1110)2 and (1010)2 by working through each step of the algorithm for multiplication given in the text. (Textbook [KR] Page 231: 50, Hint: Page 224-225)
6. (15 min)How many bit operations does the comparison algorithm from Exercise 53 use when the larger of a and b has n bits in its binary expansion? (Textbook [KR] Page 231: 54 , hint: use the algorithm given in the answers section, page S-22, of the textbook)