Module 1 (Lectures 1-2) Program execution and Data Representation

1. The maximum unsigned integer value that can be represented in 8 bits is
   a) 127
   b) 128
   c) 255
   d) 256

2. You can get the GNU C compiler to produce an assembly language equivalent of your C source program using the compiler flag
   a) -a
   b) -S
   c) -p
   d) -x

3. In sign-magnitude representation, the signed integer value -2 will be represented in 8 bits as
   a) 10000001
   b) 10000010
   c) 00000001
   d) 00000010

4. The IEEE floating point uses a normalized representation in order to
   a) ensure that each real value has a unique representation
   b) reduce the number of bits needed to represent the exponent
   c) remove the need for a sign bit
   d) provide a way to represent infinity

5. A program written in a high level language is compiled before it is executed in order to
   a) identify logical errors in the program
   b) improve the formatting of the program statements
   c) produce a program that can be executed on hardware
   d) test the program thoroughly before it is used in the field