Exercise 3

1. A 16 bit DA converter's range is from –5V to +5V. The scale is linear and 0000H means -5V.
   Define   voltage value if the following combination is written to the converter
   - a) CAB1H
   - b) 1566H
   - c) 4588H

2. A 16 bit AD converter's range is from –5V to +15V. The scale is linear and 0000H means -5V.
   Define the the reading of AD converter if the analog input voltage is
   - a) –1V
   - b) 2.8V
   - c) 9.2V
   - d) 14V

3. A 16 bit DA converter's range is from –10V to +10V. This DA converter is connected to the series
   connection with a 12 bit AD converter, the scale of which ranges from –5V to +15V. What does the
   AD converter show if the written data to the DA converter is
   - a) CCABH
   - b) 88A0H
   - c) 9ABBH