AUSTIN COMMUNITY COLLEGE
DEPARTMENT OF COMPUTER STUDIES AND ADVANCED TECHNOLOGY

COSC 2325 (3-2-4) – Computer Organization and Machine Language
Assignment 6 (Team Assignment)

Write the corresponding ARMv8 Assembly code for the following C code exercises. Registers are expected to be initialized before used.

1) x= (y & 15) | (z << 3)

2) for (k=0; k<7; k++){
   m=m+k;
  }

3) if (x == 0) {
    x= x+5;
  }
else{
  //Display a message of your preference
}

4) if (x<y){
   a=5;
   b=c+d;
  else a=c-d

5) while(i != j) {
   if (i > j)
     i -= j;
   else
     j -= i;
  }

Each exercise must be implemented in a separate file. Assembly code files (.s files) should be uploaded under File Exchange in your corresponding Group module in BB.