** Use SIC or SIC/XE to complete the following program.
(Write assemble program that can be executed using SIC or SIC/XE CPU)

- Add comments in your program. Esp. SIC or SIC/XE assembly.
- File name: student_id_1A.ASM (Basic problem)
- File name: student_id_1B.ASM (Advanced problem)
- Pick either basic or advanced problem. Sure you can do both.

1. Program 1A:

A = 5^3 // if you can input 5, even better. 125
B = $(-2)^2$ // if you can input -2, even better. 4
C = |B – A| // compute absolute value 121
D = A – B 121
Swap A, B 4 125
E = B*B*B //Must use loop 1953125
If A is odd then F = 15 else F = 30
If B is odd then G = 'ODD' else G = 'EVN'
H = B / A –15
J = E mod A –3

2. Program1B: // If you can input the matrix, even better

M = 2 4 6
1 3 5
N = 2 9
5 7
8 3
O = 1 2
3 4
5 6

Compute P = M × N // matrix multiplication
A1 = $P_{1,1}$
A2 = $P_{1,2}$
A3 = $P_{2,1}$
A4 = $P_{2,2}$
Compute Q = N - O // matrix subtraction