ACTIVITY:

Task#1

Write ASM instructions that calculate EAX * 21 using binary multiplication.
Hint: $21 = 2^4 + 2^2 + 2^0$.

Task#2

Give an assembly language program to move -128 in ax and expand eax. Using shift and rotate instruction.

Task#3

The time stamp field of a file directory entry uses bits 0 through 4 for the seconds, bits 5 through 10 for the minutes, and bits 11 through 15 for the hours. Write instructions that extract the minutes and copy the value to a byte variable named **bMinutes**.

Task#4

Write a series of instructions that shift the lowest bit of AX into the highest bit of BX without using the SHRD instruction. Next, perform the same operation using SHRD.

Task#5

Implement the following C++ expression in assembly language, using 32-bit signed operands:

val1 = (val2 / val3) * (val1 / val2);