Dr Gamal Fahmy   Computer Architecture and Organization
Faculty of Computer Science and Engineering, Galala University

Assignment 5 sol

What is the memory size for the following address bus sizes
- 32 bits   4GB
- 29 bits   0.5 GB
- 25 bits   32 MB
- 18 bits   256KB

How many address bits needed for these memory sizes
- 32 MB   25
- 16 MB   24
- 2 GB   31
- 256 KB   18

Assume that SP=FE2EH, AX=3291H, BX=F43CH, and CX=09. Find the contents of the stack and stack pointer after the execution of each of the following instructions

PUSH AX
PUSH BX
PUSH CX

SS:FE28				09
SS:FE29				00
SS:FE2A			3C	3C
SS:FE2B			F4	F4
SS:FE2C		91	91	91
SS:FE2D		32	32	32
SS:FE2E				