

**(100 points)** Define a FAR procedure named CONWAY that finds the elements of the sequence defined by the recurrence relation given below. The CONWAY procedure should be designed to accept an input parameter via the stack and return a value via the stack. Also, design the PRINTINT procedure that prints the return value of the CONWAY procedure to the console in decimal format. Write the main procedure that calls the CONWAY procedure with an input value of 10, as well as the CONWAY procedure and the PRINTINT procedure, in assembly language.

**(BONUS 20 points)** Additionally, write the CONWAY procedure utilizing dynamic programming. Test the CONWAY procedure with an input value of 500.

Submit your answer as an OgrenciNo\_Isim.asm file on [online.yildiz.edu.tr](http://online.yildiz.edu.tr). Responses that do not compile in the DOSBox environment will not be considered.