HW2 (*due 23 March ,2021 Tuesday before recitation)*

1- *State the Turing Machines in the tabular format discussed in class and lecture notes that implement the following* ***RATM*** *statements :*
(a) add =c ; ***(b)*** *jpos s* ***; (c)*** *sub j*

2- *Assuming a 2 tape TM that multiplies the binary coded positive integers in tapes 1 and 2 and writes the result in tape 1 is available and is named as* ***MULT*** *; construct in tabular format a multitape , nondeterministic TM that* ***decides*** *whether a given binary coded integer is a prime number making use of the TM* ***MULT****.*

3- *Problems from the main text book (note the word accepts means semidecides in our class terminology): 4.5.1, 4.5.2*