Time Complexity

Basic Primer

Problem	Answer
LOOP_CMPL	O(N+M) time , O(1) space
NESTED_CMPL	O(N*N) time, O(1)space
NESTED_CMPL2	O(N*N)
CHOOSE4	X will always be a better choice for larger input

Math

Problem	Answer
WHILE_CMPL	O(N/2)
NESTED_CMPL3	O(N)
LOOP_CMPL2	$\Theta(nLogn)$
GCD_CMPL	$\Theta(\log n)$

Compare function

Problem	Answer
CHOOSE1	$N^3/sqrt(N)$
CHOOSE3	C
CHOOSE2	f3 , f2,f4, f1

Function calling itself

Problem	Answer
REC_CMPL1	O(N)
REC_CMPL2	$O(2^{(R*C)})$

Problem	Answer
REC_CMPL3	O(R*C)

Amortized complexity

Problem	Answer
AMORTIZED1	O(n)