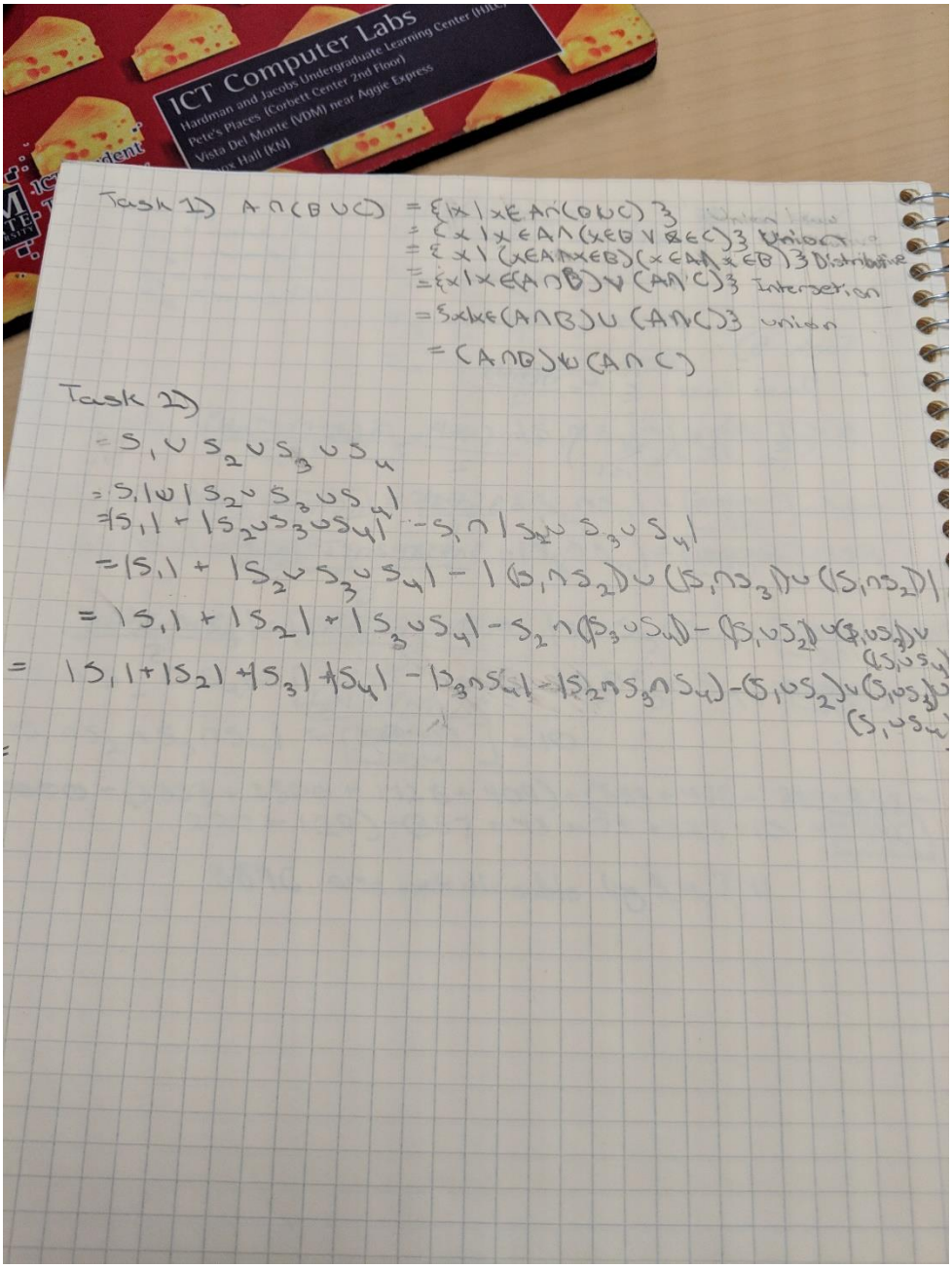
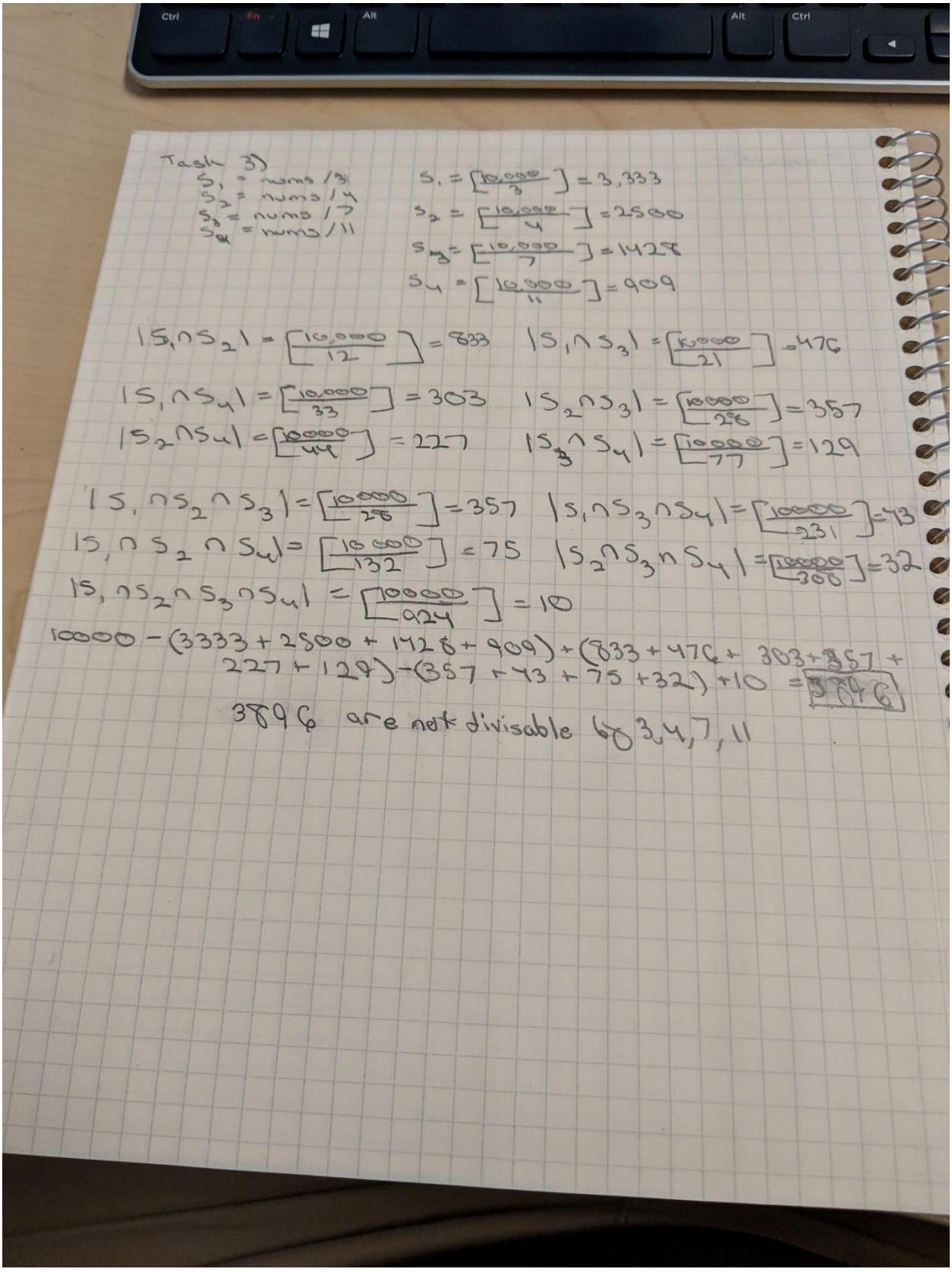
Zachary Neeley

CS 273 Lab 5

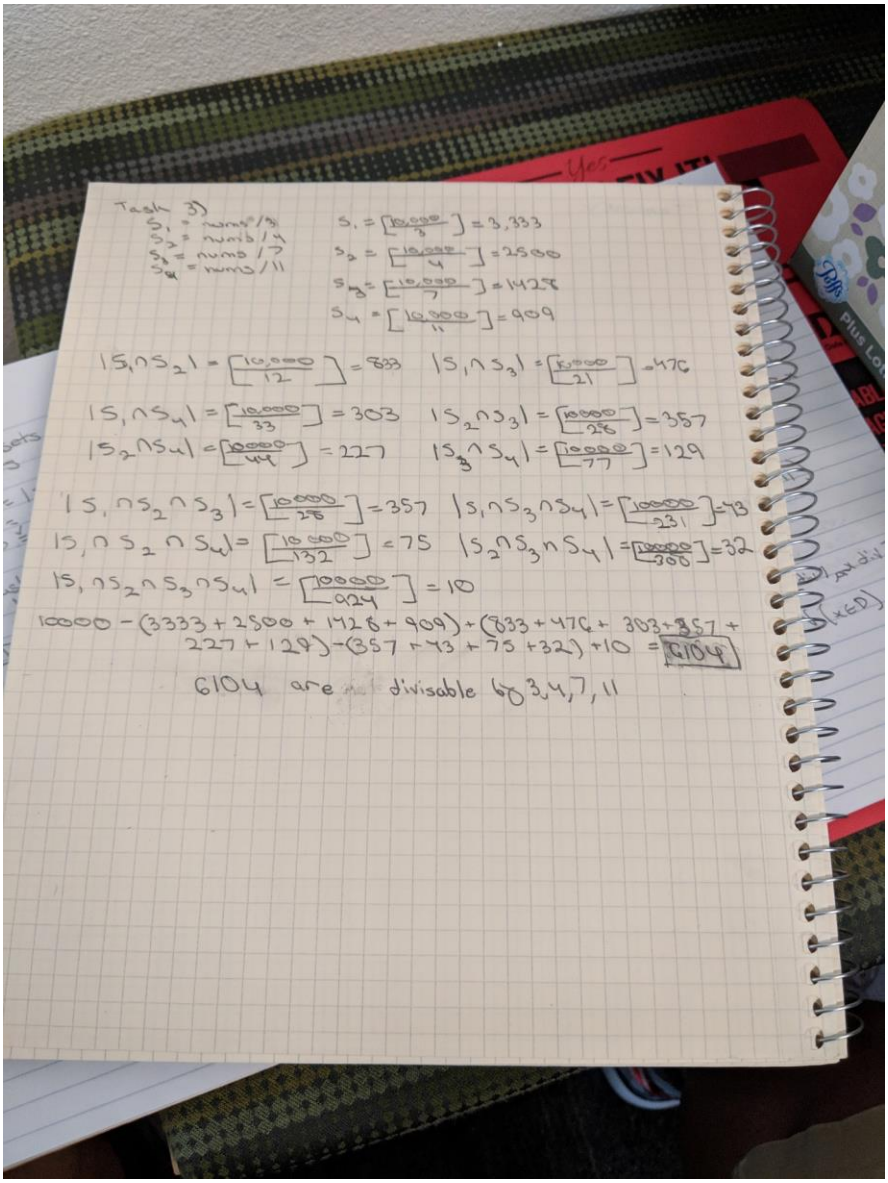
Task 1 and 2)



Task 3)


Task 3)
S_1 = nums /3
S_2 = nums /4
S_3 = nums /7
S_4 = nums /11
$S_1 = \left[\frac{10,000}{3}\right] = 3,333$
$S_2 = \left[\frac{10,000}{4}\right] = 2500$
$S_3 = \left[\frac{10,000}{7}\right] = 1428$
$S_4 = \left[\frac{10,000}{11}\right] = 909$
$|S_1 \cap S_2| = \left[\frac{10,000}{12}\right] = 833$
$|S_1 \cap S_3| = \left[\frac{10000}{21}\right] = 476$
$|S_1 \cap S_4| = \left[\frac{10,000}{33}\right] = 303$
$|S_2 \cap S_3| = \left[\frac{10000}{28}\right] = 357$
$|S_2 \cap S_4| = \left[\frac{10000}{44}\right] = 227$
$|S_3 \cap S_4| = \left[\frac{10000}{77}\right] = 129$
$|S_1 \cap S_2 \cap S_3| = \left[\frac{10000}{28}\right] = 357$
$|S_1 \cap S_3 \cap S_4| = \left[\frac{10000}{231}\right] = 43$
$|S_1 \cap S_2 \cap S_4| = \left[\frac{10000}{132}\right] = 75$
$|S_2 \cap S_3 \cap S_4| = \left[\frac{10000}{308}\right] = 32$
$|S_1 \cap S_2 \cap S_3 \cap S_4| = \left[\frac{10000}{924}\right] = 10$
$10000 - (3333 + 2500 + 1428 + 909) + (833 + 476 + 303 + 357 + 227 + 129) - (357 + 43 + 75 + 32) + 10 = 3846$
3846 are not divisable by 3,4,7,11

Task 4)



Task 5) Java program in this ZIP file.