Homework 3
CSE 215: Foundations of Computer Science
State University of New York at Stony Brook
Instructor: Prof. Pramod Ganapathi

Total points = 85. Total questions = 16. Total pages = 2.
Questions are from our course textbook, **Brief Edition**.

Problem 1. [5 points]
    Exercise Set 4.1, Problems 52, 53

Problem 2. [5 points]
    Exercise Set 4.1, Problem 61

Problem 3. [5 points]
    Exercise Set 4.2, Problem 30

Problem 4. [5 points]
    Exercise Set 4.2, Problems 38, 39

Problem 5. [5 points]
    Exercise Set 4.3, Problem 30

Problem 6. [5 points]
    Exercise Set 4.3, Problem 34

Problem 7. [5 points]
    Exercise Set 4.3, Problem 35

Problem 8. [5 points]
    Exercise Set 4.3, Problem 42(c)

Problem 9. [5 points]
    Exercise Set 4.3, Problem 43

Problem 10. [5 points]
    Exercise Set 4.4, Problem 30(a)

Problem 11. [5 points]
    Exercise Set 4.4, Problem 31(a)

Problem 12. [5 points]
    Exercise Set 4.4, Problem 40

Problem 13. [10 points]
    Exercise Set 4.5, Problem 24

Problem 14. [5 points]

    Exercise Set 4.5, Problem 31(b)

Problem 15. [5 points]

    Exercise Set 4.5, Problem 33

Problem 16. [5 points]

Show that among any set of arbitrary (1 trillion + 1) natural numbers, one can find two numbers so that their difference is divisible by 1 trillion.