

AVALG13

Integer Factorization

November 7, 2013

Carl Eriksson
Viktor Mattsson

carerik@kth.se
vikmat@kth.se

Contents

1	Introduction	2
1.1	Statement of collaboration	2
1.2	Problem statement	2
1.3	Definitions	2

1 Introduction

1.1 Statement of collaboration

1.2 Problem statement

Prime numbers are a quite interesting set of numbers. They share the special trait that they are only divisible by one or themselves, unlike non-primes. However, every non-prime number can be written as a series of prime number which is useful when computing data with large integers as it allow dividing a big problem into several smaller ones. Finding this series of primes or more commonly, finding the factors of these large integers is however no simple matter and efficient algorithms are needed.

1.3 Definitions

- N - Number to be factorized
- GCD - Greatest common divisor
- Kattis - Code “judge” used by KTH to test code