Your task in this project is to generate primes using Mihailescu's Algorithm discussed in class. Generate at least 3 primes, of size 1000, 2000, and 3000 bits, respectively, together with primality certificates for each. Also, record the time that it took to generate each prime, and generate enough additional primes and timings to estimate the amount of time it would take to generate a $100,000,000$ decimal digit prime (the current Electronic Frontier Foundation prize size).

