RSA

**TEST CASES – MS2**

# SAMPLE TESTS

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| **Test cases** | **Description** |
| SampleRSA\_II/SampleRSA.txt | Contains sample cases for RSA encryption and decryption |
| Complete Test/TestRSA.txt | Contains complete cases for RSA encryption and decryption |

## Input

**SAMPLE & COMPLETE TEXT FILES** contain **number of test cases** in the first line followed by each test case that is represented in **4 lines** as follows:

1. N
2. e or d
3. M or E(M)
4. 0 or 1 (0-> encrypt, 1-> decrypt)

**IMPORTANT HINT:**

* **Sample and complete files contain an encryption test case FOLLOWED by its decryption test case and then a new encryption case followed by its decryption case and so on.**

## Output

1. Save the result of each encryption or decryption process in a single file. **ONE OUTPUT FILE for the sample cases and another ONE for the complete cases.**
   1. Write the result of each test case on a separate line.
2. Calculate the execution time for both the encryption & decryption for each test case in the **COMPLETE** cases.

#### How to calculate execution time?

To calculate time of certain piece of code:

1. Get the system time before the code
2. Get the system time after the code
3. Subtract both of them to get the time of your code

To get system time in milliseconds using C#, you can use System.Environment.TickCount