

# **RSA Assignment**

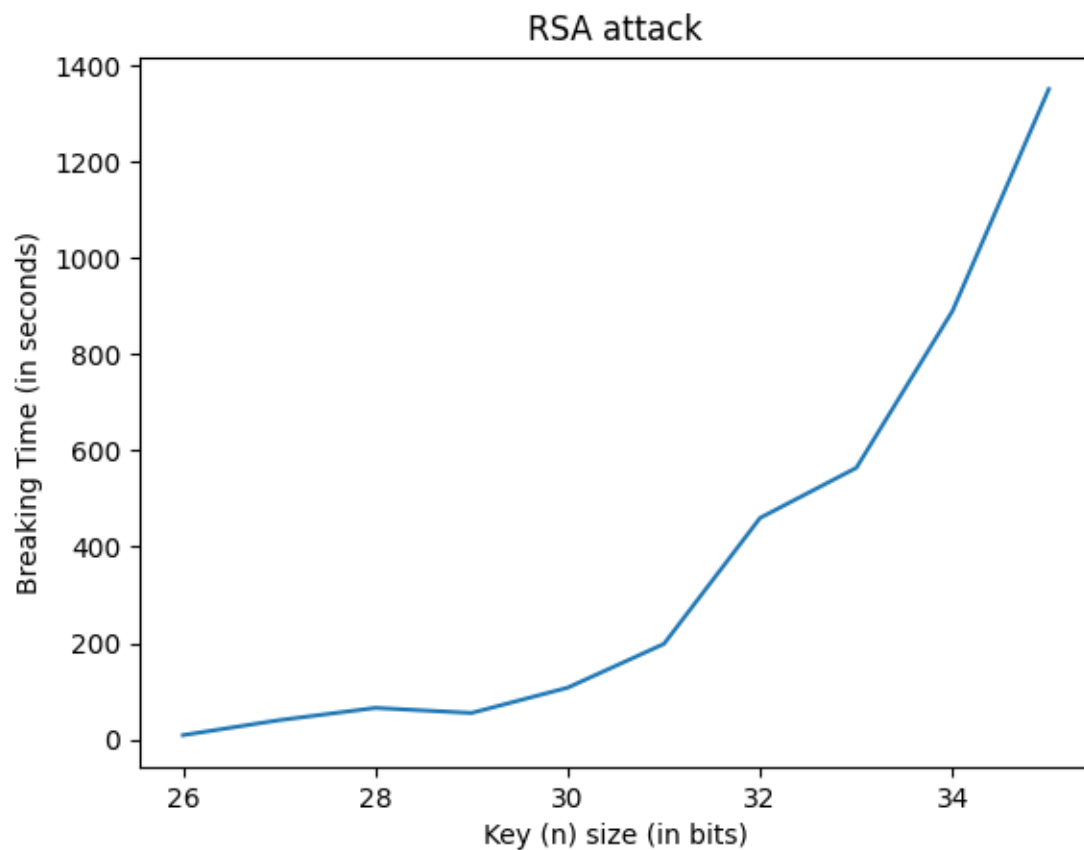
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**Section:** 2

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To test the strength of RSA encryption is to use different key sizes and attempt to break the encryption using a brute force attack. This involves trying all possible combinations of keys until the correct one is found.

## Analysis of the results



As shown in this curve the exponential behavior of brute forcing on the private key with public key  $n < 35$  bits which is the maximum key size my machine could break.

## Conclusion

As the key size increases it becomes much more difficult and time-consuming to break the encryption using brute force (2048 bits size which will take forever to break). This demonstrates the importance of using sufficiently large key sizes to ensure the security of RSA encryption.