

DATE: 26/2/25

BREAKING RSA

AIM:

To implement RSA using Fermat's Factorization Algorithm.

PROCEDURE:

Task 1. Capture the Flag

Answer the questions below

How many services are running on the box?	2	✓ Correct Answer
What is the name of the hidden directory on the web server? (without leading '/')	development	✓ Correct Answer
What is the length of the discovered RSA key? (in bits)	4096	✓ Correct Answer
What are the last 10 digits of n? (where 'n' is the modulus for the public-private key pair)	1225222383	✓ Correct Answer
Factorize n into prime numbers p and q	No answer needed	✓ Correct Answer
What is the numerical difference between p and q?	1502	✓ Correct Answer
Generate the private key using p and q (take e = 65537)	No answer needed	✓ Correct Answer
What is the flag?	breakingRSAissuperfun20220809134031	✓ Correct Answer

RESULT:

Hence, RSA is implemented using Fermat's Factorization Algorithm.