**THINGS TO KNOW:**

1. **Lab report must contain following sections: (order must be maintained)**

   a) **Title /Question**

   b) **Theory: The brief overview of the concept /techniques/syntax/technology used in the program**

   c) **Code: The complete code**

   d) **Output: Screenshot of the output**

2. **Output screen should be captured (use snipping tool), printed and attached in the report. Other contents must be handwritten or printed.**

3. **Every Source code must include the printing statements to print following information after your main output:**

   **Lab No.:**

   **Name:**

   **Roll No./Section :**

4. **Contents should be written on single side of A4 sized paper.**

5. **The works must be submitted within specified deadline.**

6. **Cover page and Content page should be attached in the report appropriately.**

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**Content Page Format (can be printed)**
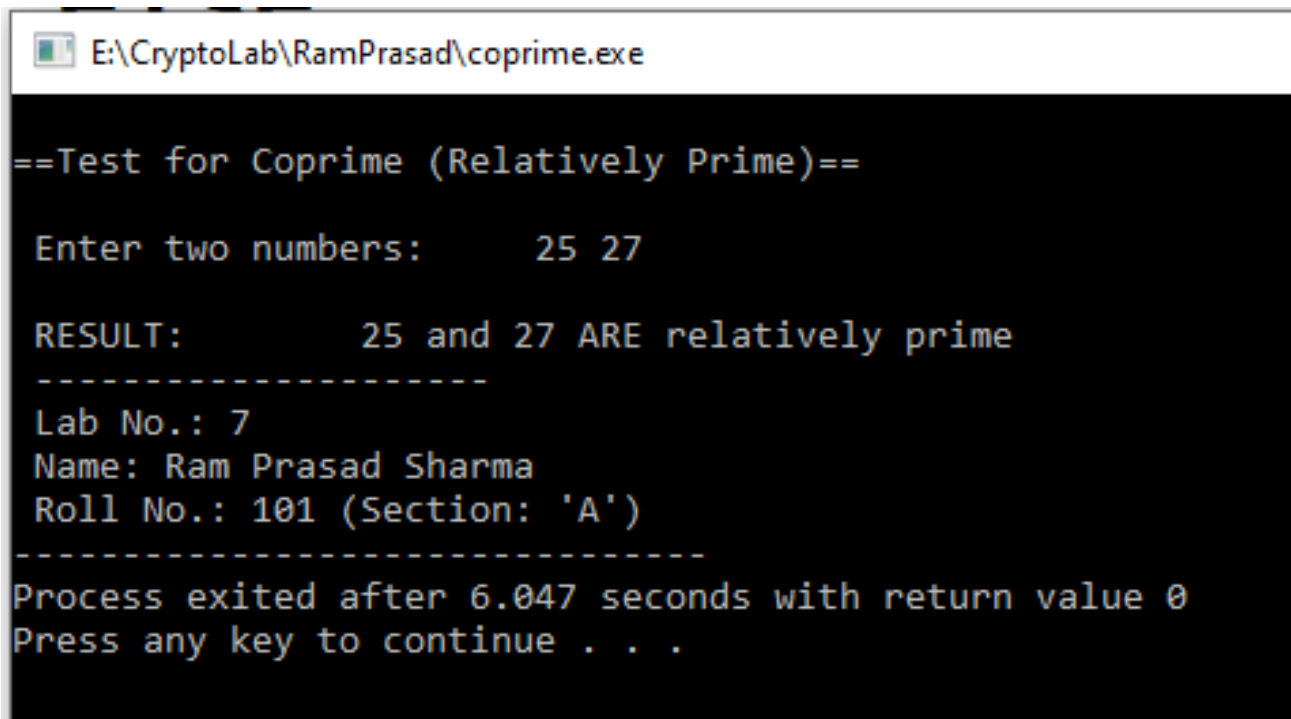
**List of lab works**

| Lab No. | Title /Question | Submission Date | Signature | Remarks |
|---------|-----------------|-----------------|-----------|---------|
| 1(a) | To print bio data | 2070/08/22 | | |
| 1(b) | To take two numbers and display their sum | 2070/08/22 | | |
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## Instruction:

**Create a folder Named "CryptoLab". Inside this folder make another folder with your name (for example RamPrasad) and write the C/C++ prosgrams inside this folder for each questions listed below. [Your screenshots of output must contain the title bar with file paths. See the sample output given below.]**

## Sample Output:



## Lab Works (Cryptography / BSc.CSIT 5th -sem)

## (Lab Part -1)

Lab 1: Write a program to implement Shift Cipher. (Encryption/Decryption/ Input (key/plaint text for encryption/ cipher text for decryption) should be taken from user).

Lab 2: Write a program to implement Playfair Cipher. (Encryption/Decryption/ Input should be taken from user, Display the key matrix as well).

Lab 3: Write a program to implement Rail Fence Cipher. (Encryption/Decryption/ Input should be taken from user).

Lab 4: Write a program to implement Vigenere Cipher. (Encryption/Decryption/ Input should be taken from user).

Lab 5: WAP to implement Euclidean Algorithm to find GCD of given numbers.

Lab 6: Write a program that computes additive inverse in given modulo n.

Lab 7: Write a program which takes two numbers and display whether they are relatively prime or not.

Lab 8: Write a program to implement Extended Euclidean Algorithm. (Display the results of iterations in tabular format)

Lab 9: WAP to compute multiplicative inverse in given modulo n using Extended Euclidean Algorithm.

Lab 10: Write a program to implement Hill Cipher (Key matrix of size 2*2/ Encryption/ Decryption/ Input should be taken from user).