

Group 1

1. Using c/c++, write a program to implement shift cipher.
2. Using java programming language, write a program to implement brute force attack.
3. Using php, write a program to implement frequency analysis techniques.
4. Using python/php, write a program to implement vigenere cipher.
5. Using c/c++/java, write a program to implement playfair cipher.
6. Using php, write a program to implement rail fence cipher.
7. Using c/c++, write a program to implement columnar transposition cipher.
8. Using java, write a program to implement hill cipher.
9. Using php programming language , write a program that displays the following output

Enter number 1: 456

Enter number 2: 78

GCD(456,78)

GCD(78,66)

GCD(66,12)

GCD(12,6)

GCD(6,0)

GCD(456,78)=6

10. Using c++, Using php programming language , write a program that displays the following output
Enter two numbers: 57 27
 $57=3^1 * 19^1$
 $27=3^3$
GCD(57,27)=3
11. Using c++, Using php programming language , write a program that displays the following output
Enter two numbers: 57 27
 $57=27*2+3$
 $27=3*9+0$
GCD(57,27)=3
12. Using c++, Using php programming language , write a program that displays the following output
Enter two numbers: 57 27
Div 57={1,3,19,57}
Div27={1,3,9,27}
 $\text{Div } 57 \cap \text{Div } 27 = \{1,3\}$
Max(1,3)=3
GCD(57,27)=3
13. Using php programming language, write a program that displays the prime numbers between two entered numbers
14. Using Java programming language, write a program that calculates $a^{-1} \bmod n$ where a and n are integers

15. Using c/c++, write a program that calculates $a \bmod m$ where a, n and m are positive integers
16. Using php programming, write a program that displays the LCM between two entered numbers.

Group	Questions
1	1 & 9
2	2 & 10
3	3 & 11
4	4 & 12
5	5 & 13
6	6 & 14
7	7 & 15
8	8 & 16

Submit codes and output on 17th November 2023 .

Use bizimungut@gmail.com