C CODES OUTPUTS

1. Q - Swap Two Numbers Without Using a Third Variable
   O - Enter two integers:
   5 10
   Before swapping: a = 5, b = 10
   After swapping: a = 10, b = 5

2. Q - GCD of two numbers
   O - Enter two integers:
   48 18
   GCD of 48 and 18 is 6

3. Q – LCM of two numbers
   O - Enter two integers:
   12 15
   LCM of 12 and 15 is 60

4. Q – Prime Number Checker
   O - Enter an integer:
   29
   29 is a prime number

5. Q – Prime Factor Of a Number
   O - Enter an integer:
   28
   Prime factors of 28 are: 2 2 7

6. Q – Armstrong Number Checker
   O - Enter an integer:
   153
   153 is an Armstrong number

7. Q – Fibonacci Sequence Generator
   O - Enter the number of terms:
   10
   Fibonacci sequence:
   0 1 1 2 3 5 8 13 21 34

8. Q – Palindrome Number Cheaker
   O - Enter an integer:
   121
   121 is a palindrome number

9. Q – Sum Of Digits Of a Number
   O - Enter an integer:
   1234 Sum of the digits of 1234 is 10

10. 1 + 2 + 3 + ……. + n

11. *X - (1/2)*X^2 + (1/3)*X^3 - (1/4)*X^4 + ... -(1/n)*X^n*

12. *X - 2*X^2 + 3*X^3 - 4*X^4 +... - n*X^n*

13. (1/1!) + (2/2!) + (3/3!) + ……. + (n/n!)

14.

1	2	3	4	5
1	2	3	4	5
1	2	3	4	5
1	2	3	4	5
1	2	3	4	5

15.

1				
1	2			
1	2	3		
1	2	3	4	
1	2	3	4	5

16.

1

1 2

1 2 3

1 2 3 4

1 2 3 4 5

17.

1

1 2

1 2 3

1 2

1

18 . A

A B

A B C

A B C D

A B C D E

19. Q - largest number from any 3x3 matrix

O - Enter the elements of the 3x3 matrix:

1 2 3

4 5 6

7 8 9

The largest number in the matrix is 9

20. Q - both the diagonal sum of 3x3 matrix

O - Enter the elements of the 3x3 matrix:

1 2 3

4 5 6

7 8 9

The sum of the primary diagonal is 15

The sum of the secondary diagonal is 15

21. Q - addition of two 3x3 matrix.

O - Enter the elements of the first 3x3 matrix:

1 2 3

4 5 6

7 8 9

Enter the elements of the second 3x3 matrix:

9 8 7

6 5 4

3 2 1

The sum of the two matrices is:

10 10 10

10 10 10

10 10 10

22. Q - multiplication of two 3x3 matrix.

O - Enter the elements of the first 3x3 matrix:

1 2 3

4 5 6

7 8 9

Enter the elements of the second 3x3 matrix:

9 8 7

6 5 4

3 2 1

The product of the two matrices is:

30 24 18

84 69 54

138 114 90

23. Q - Transpose of a 3x3 matrix.

O - Enter the elements of the 3x3 matrix:

1 2 3

4 5 6

7 8 9

The transpose of the matrix is:

1 4 7

2 5 8

3 6 9

24. Q - Determinant of 3x3 matrix.

O - Enter the elements of the 3x3 matrix:

1 2 3

4 5 6

7 8 9

The determinant of the matrix is 0

25. Q - To search the element present or not, if present then it's frequency (how much times it is present).

O - Enter the number of elements in the array:

6

Enter the elements of the array:

1 2 3 4 2 2

Enter the element to search:

2

Element 2 is present 3 times in the array

26. Q - Reverse the elements in the array.

O - Enter the number of elements in the array:

5

Enter the elements of the array:

1 2 3 4 5

The elements of the array in reverse order are:

5 4 3 2 1

27. Q - swipe the odd and even elements of an array

O - Enter the number of elements in the array:

6

Enter the elements of the array:

1 2 3 4 5 6

The array after swapping odd and even elements is:

2 1 4 3 6 5

28. Q - find out largest and smallest number from an 1d array, then sort the array in ascending and descending order.

O - Enter the number of elements in the array:

6

Enter the elements of the array:

3 1 4 1 5 9

The largest number in the array is: 9

The smallest number in the array is: 1

The array in ascending order is:

1 1 3 4 5 9

The array in descending order is:

9 5 4 3 1 1

29. Q - Area of a rectangle

O - Enter the length and width of the rectangle:

5 3

The area of the rectangle is 15

30. Q - Swap Two Numbers Without Using a Third Variable

O - Enter two numbers:

5 3

After swapping:

First number: 3

Second number: 5

31. Q - Find whether an entered number is odd or even.

O - Enter an integer:

4

4 is an even number

32. Q - Find the Factorial.

O - Enter an integer:

5

The factorial of 5 is 120

33. Q - Find the sum of ***n*** numbers.

O - Enter the number of elements:

5

Enter the elements:

1 2 3 4 5

The sum of the elements is 15