MCA (1st sem) C Program

1. Write a program to find the given year is a leap year Or not and use Gregoriancalendar to calculate the same .

2. Write a program to find day of specific date.

3. Write a program to show the given number in word format.

   Example   Input →14684

   Output→ fourteen thousand six hundred eighty four

   // program should be in dynamic way , Generalized way

4. Use right and left shift operator for positive number and negative number and display what happen if the MSB is left shifted by any number and also check following input

   a = 1 and b = -1

   C = a<<32 output = ?

   C = a<<31 output = ?

   C = b<<32 output = ?

   C = b<<31 output = ?

5. Write a program to display all subset of given set by user.

6. Write a program to display proper set of given set by user.

7. Write a program to display following pattern :

   User must enter an even number N and display the following pattern for N

   Example N =6

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8. Write a program to create an array size 10 and fill all element through for loop and display all value .

9. Write a program to create 2D array of different Row and column and enter the value of each element in row wise and in another matrix element should be entered column wise.

10. Write a program to check the given square matrix is upper or lower triangular or neither of them.

11. Write a program to calculate total number of zero and total number of non zero in a 2D matrix.

12. Write a program to count total number of distinct value of 1D array.

13. Write a program to display total number of occurrence of distinct number in 1D array.

14. Write a program to calculate the average of two array element and stored in another of same size. Average will be calculate given below

C[0] = (a[0]+b[n-1]) /2

C[1] = (a[1]+b[n-2]) /2

15. Write a program to entered 1D array element of size N and interchange the all element like following

a[0]←→a[n-1]

N should be an even number .

16. Write a program to call four function name as sum, divide, mul ,modular division Separately. All function accept two argument and return the result of operation. Now scan two value from user and call these function for two values entered by user.

int sum (int, int)

float divide(int, int)

float mul(int, float)

int modular(int, int)

17. Write A recursive program to print value of counter on which the stack will be full.

18. Write A recursive program to print number in ascending as well as descendingorder with the help given value by user

19. Write A program to solve Ackermann function

F(m, n) = | (n+1)   if m=0

| F((m-1) , 1)   if m>0 , n=0

| F ((m-1), f(m, (n-1)) if m>0, n>0

20. Write A function name as reverse which accept A pointer which hold the address of array and write A code to reverse the element of passed array and print all element before and after reversing array through a print function.

21. Write A function name as transpose which accept 2D array in both form(array,pointer). Write A code to find A transposeof given matrix of size MxN where M not equal to N. Write display function which accept 2D array ,to display matrix element before and after transposingan actual array

22. Write a function named as factorial() which accept an 1D array of integer and return resultant array of factorial of each element and display all factorial in order.

23. Write a function upper triangular and lower triangular which accepts value of 2D array as a parameter . Function must checked whether the given 2D array is upper triangular or lower triangular and return 2D array through a function, display all element of array through pointer.

24. Write a function accepting two 2D array as a parameter than display subtractionand addition of these two array and display the result

NOTE- addition and subtractionshould be done by addition and subtraction function.

25. Write a function to swap consecutive position in 1D array . function must pass 1D array and return the resultant array display the content of resultant array. Array size must be even.