**Questions based on Data type & Operators:**

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| ***Sr. No*** | ***Question*** |
|  | Wap to find sum of two numbers. |
|  | Wap to find subtraction of two numbers |
|  | Wap to find multiplication of two numbers. |
|  | Wap to find division of two numbers. |
|  | Wap to find modulus of two numbers. |
|  | Wap to find sum of individuals digits of any three digits number. |
|  | Wap to print any three digit number in reverse order. |
|  | Write a program to convert a given integer (in seconds) to hours, minutes and seconds. |
|  | Wap to swap any two numbers using third variable. |
|  | *Wap to swap any two numbers without using third variable.* |
|  | Wap to swap any three numbers using fourth variable |
|  | Wap to calculate simple interest. |
|  | Write a program to convert specified days into years, weeks and days. |
|  | Write a program that accepts two item's weight and number of purchases and calculates their Weight average value. |
|  | Write a program to read an amount (integer value) and break the amount into the smallest possible number of bank notes 500,200,100,50,20,10,5,2,1. |
|  | Wap to convert temperature from 0C to Fahrenheit. |
|  | Wap to calculate area of circle. |
|  | Wap to calculate area of rectangle. |
|  | Wap to calculate area of triangle. |
|  | Write a program to accept a number from user and print it’s square & cube. |
|  | Write a program to accept roll no and marks of 3 subjects of a student, Calculate total of 3 subjects and average . |

**Questions based on Conditional Statement (if, if-else statement)**

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| ***Sr. No*** | ***Question*** |
| 1. | Write a program to read the age of a candidate and determine whether he is eligible to cast his/her own vote |
| 2. | Write a program to accept two integers and check whether they are equal or not. |
| 3. | Write a program to accept a number from user and print if it is divisible by 5 . |
| 4. | Wap to find greatest number among has given two numbers. |
| 5. | Write a program to accept a number and check if it is >10, <10 or =10 in language. |
| 6. | Write a program to accept a number from user and print if it is multiple of 7 in C language. |
| 7. | Wap to check given number is even or odd. |
| 8. | Wap to check given char is vowel or consonant. |
| 9. | Wap to check given number is positive or negative. |
| 10. | Wap to check given number is divisible by 3, 4 and 8 or not. |
| 11. | Wap to check given year is leap year or not. |
| 12. | Write a program to check whether a character is an alphabet, digit or special character. |
| 13 | Write a program to check whether the triangle is valid or not if angles are given. |
| 14. | Wap to print name of day according to number. |
| 15. | Wap to print name of month according to number. |
| 16. | Wap to find greatest number among has given three numbers. |
| 17. | Write a program to calculate profit and loss on a transaction. |
| 18. | Wap to find greatest number among has given three numbers without using logical AND operator. |
| 19. | Wap to check given number in range of 100-200 or not. |
| 20. | WAP to check wether the last digit of number (enter by user) is divisible by 3 or not. |
| 21. | Write a program to accept roll no and marks of 5 subjects of a student, if individuals subject have above 40 marks so print student qualify exam otherwise print student fail in exam and if student qualify exam so Calculate percentage got in exam by student.   * 1. If per greater than or equal to 75 🡺 A grade   2. If per between 60-75 🡺 B grade   3. If per between 50-60 🡺 C grade   4. If per between 40-50 🡺 D grade |
| 22. | Wap to calculate the total salary based on the basic salary:   * 1. If BS in between 4000-6000 🡺 ta 40% & hra is 20%   2. If BS in between 6000-10000 🡺 ta 45% & hra is 20%   3. If BS is greater than 10000 🡺 ta 55% & hra is 5000 |
| 23. | Wap to print difference between area of circle but ensure that result must be positive. |
| 24. | Write a Program to accept user’s marital status, gender and age to check if he/she is eligible for marriage or not. |
| 25. | Write a program to accept three numbers from user and print them in ascending and descending order in C language. |
| 26. | Write a program to compute the sum of the two input values. If the two values are the same, then return triple their sum. |
| 27. | Write a program to check whether a character is uppercase or lowercase alphabet. |
| 28. | Write a program to input all sides of a triangle and check whether triangle is valid or not. |
| 29. | Write a program that will take a number as input and find the absolute difference between the input number and 51. If the input number is greater than 51, it will return triple the absolute difference. |
| 30. | Check whether the triangle is equilateral, scalene, or isosceles. |
| 31. | Write a program that checks two given integers and returns true if at least one of them is 30 or if their sum is 30. In other words, if either of the two integers is 30 or if their sum equals 30, the program will return true |
| 32. | Write a program to input electricity unit and calculate total electricity bill according to the given condition: For first 50 units Rs. 0.50/unit For next 100 units Rs. 0.75/unit For next 100 units Rs. 1.20/unit For unit above 250 Rs. 1.50/unit An additional surcharge of 20% is added to the bill |
| 33. | WAP to take 2 digit number or 3 digit number or 4 digit number from user and print its reverse number and print sum of individual digit of that number and if number is not two digit or 3 digit or 4 digit so print "please enter 2 or 3 or 4 digit number". |
| 34. | Wap to display two massage first is press 1 if you want to convert given seconds into hours ,minuts and second and display result and press 2 if want convert given days into year ,month ,weeks and days. |
| 35. | Wap to display two massage first is press 1 for converts amount into (500,50,10,1 notes) and  Press 2 for converts amount into (200,100,20,5,2 notes) and display result. |

**Questions based on Control Structure (Loop) (for, while & do-while loop)**

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| ***Sr. No*** | ***Question*** |
|  | Wap to print hello message three times. |
|  | Write a program to display the first 100 natural numbers. |
|  | Wap to print table of any number. |
|  | Write a program in C to display the multiplier table vertically from 1 to n. |
|  | Wap to calculate factorial of any number. |
|  | Wap to find sum of all number between 1-25 and their average. |
|  | Wap to find sum of all number between 1-25 and check sum is even or odd. |
|  | Write a program to display the cube of the number up to an integer. |
|  | Wap to check how many numbers is even & odd between 77-165. |
|  | Wap to find sum of all even & odd number between 77-165. |
|  | Wap to check how many number is divisible by 3,4 & 8 in between 21-121. |
|  | Wap to print series of alphabet. |
|  | Wap to print Fibonacci series. |
|  | Wap to print series from 15-1. |
|  | Wap to print even series between 1-100. |
|  | Wap to print odd series between 1-100. |
|  | Write a program in C to find the number and sum of all integers between 100 and 200 which are divisible by 9 |
|  | Wap to print factors of any number. |
|  | Wap to count factors of any number. |
|  | Wap to check given number is palindrome or not. ( Use while loop ) |
|  | Wap to check given number is perfect or not.  6, 28, 496, 8128, and 33550336 |
|  | Write a C program to find the HCF (Highest Common Factor) of two numbers. |
|  | Write a C program to find the LCM of any two numbers using HCF |
|  | Write a program in C to find the LCM of any two numbers. |
|  | Wap to check given number is prime or not. |
|  | Write a C program to convert a binary number into a decimal number without using array, function and while loop. |
|  | Write a program in C to convert a decimal number into binary without using an array |
|  | Wap to check given number is Armstrong or not if given number is three digit number.  153, 370, 371, 407 |
|  | Wap to check given number in range of 1-20, if number in range than find sum of all number between this number to 20, otherwise print out of range. |
|  | Write a program to find the sum of the series 1 +11 + 111 + 1111 + .. n terms. |
|  | Write a program in C to display the sum of the series [ 9 + 99 + 999 + 9999 ...] |
|  | Print series 4,9,19,34,54………up to 10 terms. |
|  | Write a C program to check whether a number is a Strong Number or not. |
|  | Write a C program to find the 'Perfect' numbers within a given number of ranges. |
|  | Write a C program to find the Armstrong number for a given range of number. |
|  | Write a program in C to find the prime numbers within a range of numbers. |
|  | Calculate the result of following series:   * 1. (1+2)\*(3+4)\*(5+6)\*. . . . . . . . . upto 10 terms.   2. (1+2)/(3+4)+(4+5)/(6+7) +. . . . . . . . . upto 10 terms   3. 1+4+9+ 16. . . . . . . . . . . . . . . . . . . . . upto 10 terms.   4. 1+3+7+15 . . . . . . . . . . . . . . . . . . . . . upto 10 terms.   5. 1+3+5+7 . . . . . . . . . . . . . . . . . . . . . upto 10 terms.   6. 2+4+6+8 . . . . . . . . . . . . . . . . . . . . . upto 10 terms. |
|  | Write a program in C to display the n terms of a harmonic series and their sum. 1 + 1/2 + 1/3 + 1/4 + 1/5 ... 1/n terms |
|  | Write a program in C to display the sum of the series [ 1+x+x^2/2!+x^3/3!+....] |
|  | Write a program in C to make such a pattern like a right angle triangle with the number increased by 1. |
|  | Write a program in C to make a pyramid pattern with numbers increased by 1. |
|  | Write a C program to display the pattern as a pyramid using asterisks, with each row containing an odd number of asterisks. |
|  | Print following pattern   |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | |  |  |  |  | |  |  |  |  | | 1  22  333  4444  55555 | 1  12  123  1234  12345 | 5  54  543  5432  54321 | \*  \*\*  \*\*\*  \*\*\*\*  \*\*\*\*\* | | A  AB  ABC  ABCD  ABCDE | 12345  1234  123  12  1 | 4444  333  22  1 | 1234  234  34  4 | | 4321  432  43  4 | 4321  321  21  1 | 1  2 3  4 5 6  7 8 9 10 | | ABCD  ABC  AB  A | ABCD  BCD  CD  D | DCBA  DCB  DC  D | DCBA  CBA  BA  A | \*\*\*\*  \*\*\*  \*\*  \* | | 1  01  010  1010 | 1  23  456  78910 |  | A  AB  ABC  ABCD | | \*\*\*\*  \*\*\*\*  \*\*\*\* | \*\*\*\*  \*\*\*\*  \*\*\*\*  \*\*\*\*  \*\*\*\*  \*\*\*\*  SAME AS 5 BLOCK | \*\*\*\*  \*\*\*\*  \*\*\*\*  SAME AS 5 BLOCK | \*  \*\*  \*\*\*  \*\*\*\*  \*\*\*\*\*  \*\*\*\*  \*\*\*  \*\*  \* | |
|  | Print the following pattern:   |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | \*  \*\*  \*\*\*  \*\*\*\* | \*  \* \*  \* \* \*  \* \* \* \* | \*  \*\*\*  \*\*\*\*\*  \*\*\*\*\*\*\* | \*\*\*\*\*\*\*  \*\*\*\*\*  \*\*\*  \* | | ABCDE  ABCD  ABC  AB  A | A B C D E  A B C D  A B C  A B  A | |  | \*  \*\*\*  \*\*\*\*\*  \*\*\*\*\*\*\*  \*\*\*\*\*  \*\*\*  \* | ABCDEFEDCBA ABCDE EDCBA  ABCD DCBA  ABC CBA  AB BA  A A | | | \* \*  \*\*\* \*\*\*  \*\*\*\*\*\*\*\*\*\* | | | \*  \*\*\*  \*\*\*\*\*  \*\*\*\*\*\*\*  \*  \*  \* | A  B  C    Z | \*  \* \*  \* \*  \* \*  \* \* \* \* | | 1  121  12321  1234321 | A  A B A  A B C B A  A B C D C B A |  |   \*\*\*\*\*\*\*\*\*\*\*\*\*\*  \* \*  \* \*  \* \*  \*\*\*\*\*\*\*\*\*\*\*\*\*\* |
|  | Write a C program to display Pascal's triangle. If j=0 | i=0 print c=1 else c=c\*(i-j+1)/j |

**Questions based on Case Control (Switch case & goto):**

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| ***Sr. No*** | ***Question*** |
|  | Wap to print number in word in between 1-5. Like (1 =one) |
|  | Wap to check given number is even or odd. |
|  | Wap to check given char is vowel or consonant. |
|  | Wap to print name of day according to number. |
|  | Wap to print name of month according to number. |
|  | Write a program for convertor   1. For currency convertor 2. For temperature convertor 3. For weight convertor 4. For length convertor 5. For time convertor 6. For energy convertor |
|  | Wap in following pattern and calculate result:   1. For addition 2. For subtraction 3. For multiplication 4. For division 5. For modulus 6. For exit   Enter your choice:  3  Enter any two number:  10 4  Multiplication = 40  O/P |
|  | Wap to print series of number from 1-100 without using loop. (hint: goto) |
|  | Wap to calculate factorial of any number without using loop. (hint: goto) |
|  | Wap to print table of any number without using loop. (hint: goto) |

**Questions based on (Unicode) ASCII value:**

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| ***Sr. No*** | ***Question*** |
|  | Wap to print ASCII value of any char. |
|  | Wap to print ASCII chart. |
|  | Wap to convert upper char to lower char. |
|  | Wap to convert lower char to upper char. |
|  | Wap to check given char in upper case, lower case, numeric digit or special char. |
|  | Wap to print alternate char(upper🡺lower or lower🡺to upper) |

**Questions based on Integer Array:**

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| ***Sr. No*** | ***Question*** |
|  | Wap to insert & print the array elements in reverse order. |
|  | Write a program to copy the elements of one array into another array. |
|  | Wap to find sum of array elements. |
|  | Wap to find sum of array elements & check sum is even or odd. |
|  | Wap to find maximum & minimum number from array. |
|  | Write a program that accepts some integers from the user and finds the highest value and the input position |
|  | Wap to check how many numbers is even & odd in a list |
|  | Wap to check how many numbers is positive & negative in a list |
|  | Wap to check how many numbers is prime & not prime in a list |
|  | Wap to check how many numbers is Armstrong & not Armstrong in a list. |
|  | Wap to check how many numbers is perfect & not perfect in a list |
|  | Wap to check how many digits at each index of array. |
|  | Wap to find average of list. |
|  | WAP program to interchange first and last elements in a list or array. |
|  | Wap to check how many number is divisible by 3,4, & 8 in list |
|  | Wap to check (search) given number is present or not present in list. Linear search and binary search |
|  | Wap to arrange (sort) array elements in ascending or descending order. |
|  | Wap to merge any two list in a single list |
|  | Write a program in C to find the number of times a given number appears in an array. |
| 1. \*\* | Write a program to merge two arrays of the same size sorted in ascending order. |
|  | Write a program to print sum of squares of all prime numbers present in given array. |
|  | WAP to sum of indivisual digit of element of array and insert sum in new array. |
|  | wap to take a list from user and reverse all element of list and create new list with all reverse element. |
|  | Wap to chack list is sort and not sort |
|  | Wap to change array element which element have digit 2 by 3. |
|  | Write a C program to shift an element in the left direction and return a newly created array  A1[i]=a[i+1 %10] |
| 1. \*\* | Write a C program to create an array after replacing all the values 5 with 0 and shifting all zeros to the right. |
| 1. \*\* | Write a C program to create a new array from a given array of integers shifting all zeros to left direction |
| 1. \*\* | Write a C program to create an array from a given array of integers shifting all even numbers before all odd numbers |
| 1. \*\* | Write a C program to read an array of length 6, change the first element by the last, the second element by the fifth and the third element by the fourth. Print the elements of the modified array |
| 1. \*\* | Write a program in to count the total number of duplicate elements in an array. |
| 1. \*\* | Write a program to print all unique elements in an array. |
| 1. \*\* | WAP to remove duplicate element in array. |
| 1. \*\* | Write a program to count the frequency of each element of an array. |
|  | Write a program to separate odd and even integers into separate arrays. Same prime or not prime .same plindrom or not plindrom. |
| 1. \*\* | Write a program to insert the values in the array (sorted list). First find position than insert |
| 1. \*\* | Write a program to insert values in the array (unsorted list). Here value and position by user. |
| 1. \*\* | Write a program delete an element at a desired position from an array. |
| 1. \*\* | Write a program to find the second largest element in an array. |
| 1. \*\* | Write a program to find the second smallest element in an array. |
|  | Wap to print a 2\*2 matrix. |
|  | Wap to print transpose of matrix. |
|  | Write a program to find the sum of the right diagonals of a matrix. |
|  | Write a program to find the sum of the left diagonals of a matrix. |
|  | Wap to find sum of two matrix. |
|  | Write a program for the subtraction of two matrices. |
| 1. \*\* | Wap to find multiplication of two matrix. |
| 1. \*\* | Write a program to find the sum of rows and columns of a matrix. |
|  | Wap to find average of matrix. |
|  | Write a program to print or display the lower triangular of a given matrix. If(i<=j) else 0 |
|  | Write a program to print or display an upper triangular matrix. |
|  | Write a program to accept two matrices and check whether they are equal. |
|  | Write a program to accept a matrix and check given matrix is identity matrix or not. |
|  | Write a program to sort matrix. |
|  | Find maximum element of each row in a matrix |
|  | Count all sorted row in matrix . |
|  | Write a program to find a pair with given sum in the array. |
|  | Write a program in C to find the majority element of an array. A majority element in an array A[] of size n is an element that appears more than n/2 times (and hence there is at most one such element) |
|  | Write a program in C to find the number occurring odd number of times in an array. All numbers occur even number of times except one number which occurs odd number of times. |
|  | Write a program in C to find the largest sum of contiguous subarrays in an array. |
|  | Write a program in C to find the missing number in a given array. There are no duplicates in the list. |
|  | Write a program in C to rotate an array by N positions. |
|  | Write a program in C to find the ceiling in a sorted array. |
|  | Write a program in C to find the floor in a sorted array. |
|  | Write a program in C to find two elements whose sum is closest to zero. |
|  | WAP a programm to find maximum appearence element in list. |
|  | WAP a programm to create new list which have every element 4 digit if previous list have less than 4 digit element than add remaining digit only 9 .  Input list:-[123 , 5432 , 6 , 89 , 1432]  Output list:-[1239 , 5432 , 6999 , 8999 , 1432] |
|  | WAP a programm to create new list contain sublist ,sublist of new list contain elemenet of individual digit of previous list element removing  even digit.  Input list :-[1352 , 596 , 467 , 8932 ]  Output list :-[ [ 1 , 3 , 5 ] , [ 5 , 9 ] , [ 7 ] , [ 9 , 3 ] ] |
|  | Write a Python program to count the number of strings from a given list of strings. The string length is 2 or more and the first and last characters are the same. Sample List : ['abc', 'xyz', 'aba', '1221'] Expected Result : 2 |
|  | Write a Python program to get a list, sorted in increasing order by the last element in each tuple from a given list of non-empty tuples. Sample List : [(2, 5), (1, 2), (4, 4), (2, 3), (2, 1)] Expected Result : [(2, 1), (1, 2), (2, 3), (4, 4), (2, 5)] |
|  | Write a Python program to check if a list is empty or not. If not l1: print(“empty”) |
|  | Write a Python function that takes two lists and returns True if they have at least one common member. |
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**Questions based on recursion:**

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| ***Sr. No*** | ***Question*** |
|  | Write a function to print hello 10 times using recursion. |
|  | Write a function to prime number using recursion. |
|  | Write a function to calculate factorial of any number using recurtion. |
|  | Wap to claculate power using recursion . |
|  | Write a program in C to find the first capital letter in a string using recursion. |
|  | write a program to print fibonacci series using recursion. |
|  | Write a recursive function to print series from 1-10. |
|  | Write a programm to check whether a given string is a palindrome or not using recursion. |
|  | Write a program to print even or odd numbers in a given range using recursion. > |
|  | Write a program in C to get the largest element of an array using recursion. |

**Questions based String:**

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| ***Sr. No*** | ***Question*** |
|  | Write a program in C to separate individual characters from a string.  Exam :- S s I d I g I t l e |
|  | Wap to calculate length of any string. |
|  | Wap to print any string in reverse. |
|  | Write a program in C to copy one string to another string. |
|  | Wap to convert any upper string into lower string. |
|  | Wap to convert any lower string into upper string. |
|  | Wap to check how many chars is in upper case, lower case, numeric digit or special char. |
|  | Write a program in C to count the total number of vowels or consonants in a string. |
|  | Write a program in C to read a sentence and replace lowercase characters with uppercase and vice versa. |
|  | Wap to print this string **“ram-sharma”** in form of following pattern:  *Name = Ram Surname = Sharma* |
|  | Wap to concatenation any two strings. |
|  | Wap to check given string is palindrome or not. |
|  | Wap to replace any char by given char. |
|  | Wap to check given char is present or not present in string. |
|  | Wap to check given char is present how many times in string. |
|  | Wap to swap character to given string.  Ex:- int :- ram is good boy and athlete  Out:-rom is gaad bay ond othlete |
|  | Wap to check given string is identifier or not . |
| 1. \*\* | Wap to print string in reverse but word not reverse:  Int :- ram sharma indore  Out:-indore sharma ram |
|  | Wap to compare any two strings according to length. |
|  | Write a program in C to compare two strings without using string library functions. |
| 1. \*\* | Wap to sort any 10 string according to length of strings. |
|  | Write a program in C to count the total number of words in a string |
| 1. \*\* | Write a program in C to find the maximum appear of characters in a string. |
|  | Write a program in C to find the largest and smallest words in a string |
|  | Wap to print each word of string in reverse:  ram sharma indore  mar amrahs erodni |
| 1. \*\* | Write a C program to sort a string array in ascending order |
| 1. \*\* | Write a program in C to extract a substring from a given string. Position and length is given |
| 1. \*\* | Wap to find every character frequency in string. |
| 1. \*\* | Write a C program to check whether a substring is present in a string. |
| 1. \*\* | Write a program in C to find the number of times a given word 'the' appears in the given string. |
|  | Write a program in C to remove characters from a string except alphabets. |
|  | Write a program in C to replace the spaces in a string with a specific character. |
|  | Write a C program to find the repeated character in a string. |
|  | Wap to find first not repeated character in string. Int:- Assates out :- t |
|  | Write a C program to convert vowels into uppercase characters in a string. |
|  | WAP a program to change string character like a->b , b->c, c->d and z->a  Input:- Deepak is dancer  Output:- Effqbl jt eboefs |
|  | Write a program to find the list of words that are longer than n from a given string. |