

Questions

1. Write two programs to show the concept of 'typecasting'
2. Enter a four digit number .After that ,print the rightmost digit
3. Calculate the average of four numbers and display the result.
4. Convert radians to degrees and display the result
5. Convert Fahrenheit to Celsius and display the result
6. Assume a vegetable shop has 5 items to be sold. You buy a certain quantity of each of them .Calculate and print your bill .
7. Using 'Switch' ,write a program to display the grades A,B,C,D,E,F and S , according to the marks obtained.
8. Write a program that works as a calculator for the operations of add, subtract ,multiply and divide (Note: How many operands will you specify?)
9. Using nested (one inside the other) 'for' loops ,print a 3 x3 matrix with data entered through the key board.
10. Print the following using a for loop

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*  
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***  
****  
*****  
*****
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11. Print the calendar for the month of August 2014 using any control structure .
12. Take a 6 digit number . Write a program to print it reversed .Also display the sum of its digits.

QUESTIONS -2

1. **Add and subtract two integers read from the keyboard, and also calculate the product, quotient, and modulus. Use functions appropriately.**
2. **Write a program that gives a beginning balance in your savings account, and calculates the balance at the end of each quarter. The interest is compounded quarterly . Show the interest earned and balance at the end of each quarter. Present the data in tabular form with appropriate headings. Use separate functions to compute the interest and print the balance.**

3 Using recursion, write a program which calculates the Fibonacci series for any n (entered from KB).

4.Do the Tower of Hanoi program using recursion.

Histogram program

A histogram shows the frequency of occurrence.

i)Question:

There is a sequence of numbers (50 numbers) of integers from 1 to 10 .

Print out the 'frequency' of occurrence of each of these numbers

ii) Using arrays

1)Perform bubble sorting on a sequence of 50 numbers .

2) Perform bubble sorting on a set of ASCII characters

iii)Using a function, write a program to create a two dimensional matrix representing the Pascal's triangle.

iv) Write a function that copies a one dimensional array of n elements into a two dimensional array of k rows and j columns. The rows and columns must be valid factors of n .i.e. $n=k*j$.

v)Write a program (let there be functions in it) that fills the right to left diagonal of a square matrix with 0s , the lower right triangle with -1s ,and the upper left triangle with +1s. The size of the matrix should not be less than 6x6 .

vi)Write a program with a function for finding the roots of a quadratic equation . The function must pass pointers .

vi Write a program that reads an NxN square matrix ,and calculates the sum of its elements in individual rows, columns and diagonals. Also print out the largest sum .

vii)Find the reverse of an integer value recursively.

viii) Print all prime numbers less than N, where N is an integer given by the user. Define and use a function prime(x) that checks if a number is prime or not.

ix))Read two square matrices and check whether multiplication of these matrices is commutative or not.

x)Use pointers

1. To Swap two numbers using pointers
2. To find the largest of three numbers using pointers
3. Using pointers count the number of occurrences of an element in an array