

1. Convert all the flowcharts & pseudo codes done in class or as assignment into programs.
2. Write a program that works as a simple calculator. It reads two integers and a character. If the character is a +, the sum is printed; if it is a -, the difference is printed; if it is a *, the product is printed; if it is a /, the quotient is printed; and if it is a %, the remainder is printed.
3. Write a program to determine if the entered character is upper cases or lower case or is an invalid character
4. Write a program that takes a year as integer from user and checks if it is leap year or not.
5. Write a program to calculate square root of a given number to the closest whole number
6. Given a number convert it into binary.
7. You are given S - a sequence of n integers $S = s_1, s_2, \dots, s_n$. Please, compute if it is possible to split S into two parts: s_1, s_2, \dots, s_i and $s_{i+1}, s_{i+2}, \dots, s_n$ ($1 \leq i < n$) in such a way that the first part is strictly decreasing while the second is strictly increasing one. First take n as input and then take n more integers, Output yes or no
8. Write a program to print Pascal's Triangle

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          1
        1 1
       1 2 1
      1 3 3 1
     1 4 6 4 1
    1 5 10 10 5 1
   1 6 15 20 15 6 1
  1 7 21 35 35 21 7 1
 1 8 28 56 70 56 28 8 1

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