1. Write a program which inputs a positive integer *n* and outputs 2 raised to the power of *n*.
2. Write a Program in C to convert the temperature from degree Celsius to Degree Fahrenheit scale
3. Write a program in C to calculate the circumference of the circle whose radius is given.
4. Write a program in C to swap the values of variables Using third variable.
5. Write a program in C to swap the values of variables without Using third variable.
6. Write a program in C to print 1 if entered number is between 1-100 Otherwise 0 using AND operator.
7. Write a program which inputs three numbers and outputs the message Sorted if the numbers are in ascending order, and outputs Not sorted otherwise.
8. Write a program that reverses any n-digit number entered through the keyboard and tells whether the number is palindrome or not.
9. Write a program to check whether a triangle is valid or not, when the three angles of the triangle are entered through the keyboard. A triangle is valid if the sum of all the three angles is equal to 180 degrees.
10. Given the length and breadth of a rectangle, write a program to find whether the area of the rectangle is greater than its perimeter. For example, the area of the rectangle with length = 5 and breadth = 4 is greater than its perimeter.
11. Any character is entered through the keyboard, write a program to determine whether the character entered is a capital letter, a small case letter, a digit or a special symbol. The following table shows the range of ASCII values for various characters.

|  |  |
| --- | --- |
| **Characters** | **ASCII Values** |
| A-Z | 65-90 |
| a-z | 97-122 |
| 0-9 | 48-57 |
| Special symbols | 0-47, 58-64, 91-96, 123-127 |

1. An Insurance company follows following rules to calculate premium.

(1) If a person’s health is excellent and the person is between 25 and 35 years of age and lives in a city and is a male then the premium is Rs. 4 per thousand and his policy amount cannot exceed Rs. 2 lakhs.

(2) If a person satisfies all the above conditions except that the sex is female then the premium is Rs. 3 per thousand and her policy amount cannot exceed Rs. 1 lakh.

(3) If a person’s health is poor and the person is between 25 and 35 years of age and lives in a village and is a male then the premium is Rs. 6 per thousand and his policy cannot exceed Rs. 10,000.

(4) In all other cases the person is not insured.

Write a program to output whether the person should be insured or not, his/her premium rate and maximum amount for which he/she can be insured.

1. The policy followed by a company to process customer orders is given by the following rules:

(a) If a customer order is less than or equal to that in stock and has credit is OK, supply has requirement.

(b) If has credit is not OK do not supply. Send him intimation.

(c) If has credit is Ok but the item in stock is less than has order, supply what is in stock. Intimate to him data the balance will be shipped.

Write a C program to implement the company policy.

1. Using conditional operators determine:

(1) Whether the character entered through the keyboard is a lower case alphabet or not.

(2) Whether a character entered through the keyboard is a special symbol or not.

1. Write a program in C to find the greatest of three numbers using conditional operators.
2. Write a program that calculates the factorial of any given number.
3. Two numbers are entered through the keyboard. Write a program to find the value of one number raised to the power of another.
4. Write a program in C to display the months of an year using switch statement.
5. Write a program in C to check the entered alphabet for vowel or consonant.
6. Write a program to print all the ASCII values and their equivalent characters using a while loop. The ASCII values vary from 0 to 255.
7. Write a program to print out all Armstrong numbers between 1 and 500. If sum of cubes of each digit of the number is equal to the number itself, then the number is called an Armstrong number. For example, 153 = ( 1 \* 1 \* 1 ) + ( 5 \* 5 \* 5 ) + ( 3 \* 3 \* 3 )
8. Write a program to find the octal equivalent of the entered number.
9. Write a program to print prime numbers from 1 to 250
10. Write a program to produce the following output:

A B C D E F G F E D C B A

A B C D E F F E D C B A

A B C D E E D C B A

A B C D D C B A

A B C C B A

A B B A

A A

1. Write a program to produce the following pascals triangle:

1

1 1

1 2 1

1 3 3 1

1 4 6 4 1

1. Write a program in C to show the table of the entered number.
2. Write a Program in C to print even numbers from 1 to N using for loop.
3. Write a Program in C to print the Pattern upto n lines as entered by the user

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1. Write a Program in C to Print the pattern upto n lines as entered by the user

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1. Write a program in C to print the pattern.

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1. Write a program to find the grace marks for a student using switch. The user should enter the class obtained by the student and the number of subjects he has failed in.

− If the student gets first class and the number of subjects he failed in is greater than 3, then he does not get any grace. If the number of subjects he failed in is less than or equal to 3 then the grace is of 5 marks per subject.

− If the student gets second class and the number of subjects he failed in is greater than 2, then he does not get any grace. If the number of subjects he failed in is less than or equal to 2 then the grace is of 4 marks per subject.

− If the student gets third class and the number of subjects he failed in is greater than 1, then he does not get any grace. If the number of subjects he failed in is equal to 1 then the grace is of 5 marks per subject

1. Write a program to add and subtract two matrices.
2. Write a program to multiply two matrices.
3. Write a program to transpose a matrix
4. Write a program to inputs users name and displays it back to the user.