

1.	<p><b>Program to check if an entered character is in lowercase or uppercase and convert it into the other accordingly.</b></p> <p><u>Sample input/output:</u></p> <p>A) Enter the character a Character after converting into uppercase is A</p> <p>B) Enter the character G Character after converting into lowercase is g</p>
2.	<p><b>Program to input a character and print if it is an alphabet. If yes, also print whether vowel or consonant. Else check if it is a numeric character or a special symbol.</b></p> <p><u>Sample input/output:</u></p> <p>A) Enter the character e The character entered is an alphabet and a vowel.</p> <p>B) Enter the character * The character entered is a special symbol.</p>
3.	<p><b>Program to enter a quadratic equation and calculate the roots of the quadratic equation. If roots are real, print “Real roots” and print the values. Else, only print the message “Imaginary roots”.</b></p> <p><u>Sample input/output:</u></p> <p>A) Enter the co-efficients of a quadratic equation 1 5 6</p>

	<p>Real roots</p> <p>Root 1 = - 3, Root 2 = - 2</p> <p>B)</p> <p>Enter the co-efficients of a quadratic equation</p> <p>1 4 3</p> <p>Imaginary roots</p>
4.	<p><b>Program to print if a given year is a leap year/not. A year is leap year if the following conditions are satisfied:</b></p> <ul style="list-style-type: none"> <li>• Year is a multiple of 4 but not multiple of 100.</li> <li>• If it is a multiple of 100, it should also be a multiple of 400.</li> </ul> <p><u>Sample input/output:</u></p> <p>A)</p> <p>Enter the year</p> <p>1996</p> <p>It is a leap year</p> <p>B)</p> <p>Enter the year</p> <p>1900</p> <p>It is not a leap year</p> <p>C)</p> <p>Enter the year</p> <p>2000</p> <p>It is a leap year</p>
5.	<p><b>Write a C program to input electricity units and calculate the total electricity bill according to the given condition:</b></p> <p><b>For first 50 units Rs. 0.50/unit</b></p> <p><b>For next 100 units Rs. 0.75/unit</b></p> <p><b>For next 100 units Rs. 1.20/unit</b></p> <p><b>For unit above 250 Rs. 1.50/unit</b></p>

	<p><b>An additional tax of 20% is added to the bill.</b></p> <p><u>Sample input/output:</u></p> <p>Enter total units consumed:</p> <p>180</p> <p>Electricity Bill = Rs. 163.20</p>
6.	<p><b>Program to implement a calculator for basic arithmetic operations. Program must ask for two operands and the symbol of the operation and print the output accordingly.</b></p> <p><u>Sample input/output:</u></p> <p>A)</p> <p>Choices are:</p> <p>+: Add</p> <p> -: Subtract</p> <p>*: Multiply</p> <p>/: Divide</p> <p> %: Modulus</p> <p>Enter your choice:</p> <p>/</p> <p>Enter two numbers:</p> <p>6 5</p> <p>Output = 1.20000</p> <p>B)</p> <p>Choices are:</p> <p>+: Add</p> <p> -: Subtract</p> <p>*: Multiply</p> <p>/: Divide</p> <p> %: Modulus</p> <p>Enter your choice:</p> <p>*</p> <p>Enter two numbers:</p> <p>6 5</p> <p>Output = 30</p>

