

C++ Lab Assignment 6

Basic C++ Coding

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1. Write a program which input principal, rate and time from user and calculate compound interest. You can use library function.
$$CI = P(1+R/100)^T - P$$
2. Write a program to compute area of triangle. Sides are input by user.
$$\text{Area} = \sqrt{s(s-a)(s-b)(s-c)}$$

where $s=(a+b+c)/2$.
3. Write a program to check character entered is alphabet, digit or special character using library functions.
4. Write a program which displays a number between 10 to 100 randomly.
5. Write a program which accept a letter and display it in uppercase letter.
6. Write a C++ program to implement the Number Guessing Game. In this game the computer chooses a random number between 1 and 100, and the player tries to guess the number in as few attempts as possible. Each time the player enters a guess, the computer tells him whether the guess is too high, too low, or right. Once the player guesses the number, the game is over.
7. Write a program using function which accept two integers as an argument and return its sum. Call this function from main() and print the results in main().
8. Write a function to calculate the factorial value of any integer as an argument. Call this function from main() and print the results in main().
9. Write a function that receives two numbers as an argument and display all prime numbers between these two numbers. Call this function from main().
10. Raising a number to a power p is the same as multiplying n by itself p times. Write a function called power that takes two arguments, a double value for n and an int value for p, and return the result as double value. Use default argument of 2 for p, so that if this argument is omitted the number will be squared. Write the main function that gets value from the user to test power function.
