

Week 6 Assignment: Random Numbers

Directions: You are to write a C++ program that meets the instruction requirements below.

Deliverables:

Your C++ source code file. (The file with the .CPP extension). No other files will be accepted.

- A screenshot of your program running.

Program Instructions:

Write a program that uses a random number generator to generate a two digit positive integer and allows the user to perform one or more of the following operations:

1. Double the number.
2. Reverse the digits of the number.
3. Raise the number to the power of 2, 3, or 4.
4. Sum the digits of the number.
5. If the number is a two digit number, then raise the first digit to the power of the second digit.
6. If the number is a three digit number and the last digit is less than or equal to 4, then raise the first two digits to the power of the last digit.

After performing an operation if the number is less than 10, add 10 to the number. Also, after each operation determine if the number is prime.

Each successive operation should be performed on the number generated by the last operation. Your program should not contain any global variables and each of these operations must be implemented by a separate function. Also, your program should be menu driven.

Grading Criteria Assignments	Maximum Points
Program accomplishes requested operations per instructions	40
The code works and meets all assignment specifications	30
The code is organized and easy to follow and output is clear and clean	20
Uses software tools correctly and efficiently	10
Total	100