1. a) Write a C++ function named isPrime that takes a positive integer argument and returns true if the argument is prime and returns false otherwise. Assume the argument is greater than 1.
2. b) Write a C++ function named sumOfPrimes that takes a positive integer argument n and returns the sum of the first n prime numbers. For example, sumOfPrimes(6) must return 41 , which is the sum of the first 6 prime numbers: 2+3+5+7+11+13 = 41. You must use the isPrime function you defined in part (a) to define the function sumOfPrimes.

3. Write a function named myRandomNumber that takes no argument and returns a random integer in the range [1, 100].

4. Write a C++ main program that repeatedly generates and prints random integers in the range [1, 100]. The program must stop when the absolute value of the difference between successive printed values is less than 5. You must make use of the myRandomNumber function you defined in part (a) when you write your main program. You must provide all the required includes and namespaces when writing your main program. Two sample outputs are given to help you understand the problem: 1.
   The program can possibly output this: 76 43 77 94 54 41 45 2.
   The program can possibly output this: 42 40

5. Write a function named rotateArray that takes an array of floats and the size of the array as arguments and rotates the elements of the array to the left by one. This means the first element of the array should be rotated to end of the array. You are not allowed to declare an array inside the function body. For example calling the function on the array [5, 7, 1, 9, 0] will rotate it and change it to [7, 1, 9, 0, 5].

6. Write a function named isPalindrome that takes a non-negative integer argument and returns true if the number reads the same backwards and forward and returns false otherwise. For example calling the function with 34543 will return true; calling it with 1231 will return false, and calling it with 8 will return true