Lab Work – simple while loop

1. Write a program that contains the following:

   Part A:

   - Read in a number from user.

   - If the number is not divisible by 5, output: "Please enter a number divisible by 5." And then read in user's input again until the number is divisible by 5.

   - The program should let the user to enter the number again until the number is divisible by 5.

   Part B:
   - Ask the user enter a positive integer
   - If the user gives a non-positive response force the user to keep entering a number until a positive input is received.

2. Write a guessing game that describes as follows:
   - Player 1 will enter a number. The number that player 2 will have to guess
   - Player 2 will guess a number.
   - If player 2's number is larger than player 1's number, output: "Please enter a smaller number." And let player 2 to enter again.
   - If player 2's number is smaller than player 1's number, output: "Please enter a larger number." And let player 2 to enter again.
   - Otherwise, output: "Congratulations, you won!" And exit the program.

3. Write a complete C++ program that does the following. (Programs that correctly carry out some of the tasks will receive partial credit.)
   a. It asks the user to enter a positive integer.
   b. The program reads a value x entered by the user. If the value is not legal, the program repeatedly makes the user type in another value until a legal value of x has been entered.
   c. The program prints a triangular display which has the number x on its top row. Each later row is obtained by omitting the last digit from the number on the previous row.

   For example, if the user enters 19683 for x the program should print the following picture.

   19683
   1968
   196
   19
   1