

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 to 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 is described as follows:

- Player 1 will enter a number. Player 2 will have to guess the number.
- 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.

- 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.

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19683
1968
196
19
1
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