

Assignment 2

Loops

1. Write a program to print all natural numbers from 1 to 25.
2. Write a program to print all natural numbers in reverse (from 30 to 1).
3. Write a program to print all odd numbers between 1 and 100 inclusive.
4. Write a program to find the sum of all natural numbers between 1 and 50 inclusive.
5. Write a program to find the sum of all even numbers between 1 to 50 inclusive.
6. Given a number 'num', find its factorial. (Factorial of 7 = $7! = 7 \times 6 \times 5 \times 4 \times 3 \times 2 \times 1$)
7. Given two integers a and b, find the value of a raised to power b. Ex: a=2, b=3 will give 8.
8. Write a program to print multiplication table (upto 10) of any number saved in variable 'num'. Print the full expression on each line, ex: "3 x 10 = 30"
9. Write a program to check whether a number is Prime number or not.
10. Write a program to print all Prime numbers between 1 and 100.
11. Ask user to enter a command. If the command is not "x" print the command and ask for the next command. Keep repeating, until the user enters "x".

HINT: Use a 'while' loop.

12. Write a program to print the following triangle using for-loop.

HINT: First figure out how to print multiple stars on the same line.

In Java, use `System.out.print` instead of `System.out.println`

In JS and Python, keep adding stars into an empty string. Then print the entire string at once.

In C++, this is not an issue because `endl` is used explicitly.

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13. Write a program to print the following triangle using for-loop.

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