

SUM OF ODD NUMBERS

The image displays the LabVIEW software interface for a program titled "Exp no 7a Application Using WHILE LOOP.vi". The interface is split into two main sections: the front panel on the left and the block diagram on the right.

Front Panel:

- It features a title "SUM OF N ODD NUMBERS" at the top.
- There is an input control labeled "N" with a numeric value of 5.
- There is an output indicator labeled "Sum of N Odd Numbers" with a numeric value of 25.

Block Diagram:

- The block diagram is enclosed in a "While Loop" structure, which is currently set to "Do Once" (indicated by a green stop button at the bottom right).
- Initialization:** A constant value of 1 is connected to a multiplier block (\times) and an adder block ($+$). The multiplier block also receives input from the "N" control.
- Calculation:** The output of the multiplier block is connected to an adder block ($+$). The output of this adder block is connected to a subtraction block ($-$), which also receives input from the "N" control.
- Sum Accumulation:** The output of the subtraction block is connected to a sum indicator block labeled "Sum of N Odd Numbers".
- Loop Control:** The output of the subtraction block is also connected to a decision block ($=$). The decision block compares the current value of "N" with the value 1. If the condition is true, the loop continues. If false, the loop terminates.

SUM OF EVEN NUMBERS

