# CSCI-2467 Lab 2 – Hurricane Wind Scale

## Background

The intensity of a hurricane is classified according to the Saffir-Simpson hurricane wind scale. The scale together with wind classifications of lower intensities is shown below:

|  |  |
| --- | --- |
| **Hurricane Wind Scale Classification** | **Wind Speed Range (MPH)** |
| Not in scale | 0 – 38 mph |
| Tropical storm | 39 – 73 mph |
| Category One Hurricane | 74 – 95 mph |
| Category Two Hurricane | 96 – 110 mph |
| Category Three Hurricane | 111 – 129 mph |
| Category Four Hurricane | 130 – 156 mph |
| Category Five Hurricane | 157 mph or more |

## Assignment

Write a Java program that asks the user to enter the wind speed. Use a series of nested if statements to determine the intensity of the storm using the above table. Output your result.

Validate your input to check for (invalid) negative wind speeds. For invalid wind speeds – output the classification: Invalid input.

Be sure to include a comment with your name, date, and a short description of the program.

Begin your program as follows:

**package** edu.cscc;  
  
**import** java.util.Scanner;  
  
*//* ***TODO - add name, date, and purpose of program here*public class** Main {  
  
 **public static** Scanner *input* = **new** Scanner(System.***in***);  
  
 **public static void** main(String[] args) {  
 **long** speed;  
 String classification;  
 *//* ***TODO - write your program here*** }  
}

## Example Output

## Enter wind speed (mph): 129

## Classification: Category Three Hurricane

## Additional Information

Do not include unnecessary if statements or unnecessary logical AND/OR clauses in your code.