Siena College's 33rd Annual High School Programming Contest Sponsored by Transfinder

June 2, 2021

Gold Problem #1: The Answer My Friend, Is Blowin in the Wind

Background Information:

The Beaufort Scale is a classification of wind speed based on the outside conditions. The scale has 13 classifications based upon the speed of the wind and is given in both miles per hour and knots.

Speed (MPH)	Speed (KNOTS)	Classification	
0	0	CALM	
1 – 3	1 – 3	LIGHT-AIR	
4 – 7	4 - 6	LIGHT-BREEZE	
8 – 12	7 – 10	GENTLE-BREEZE	
13 – 18	11 – 16	MODERATE-BREEZE	
19 – 24	17 – 21	FRESH-BREEZE	
25 - 31	22 - 27	STRONG-BREEZE	
32 - 38	28 - 33	NEAR-GALE	
39 – 46	34 – 40	GALE	
47 – 54	41 – 47	SEVERE-GALE	
55 – 63	48 – 55	STORM	
64 – 72	56 – 63	VIOLENT-STORM	
73+	64+	HURRICANE	

Your program will read in a non-negative integer less than 200 and a string that is either MPH or KNOTS. This input is the speed and unit of the current weather conditions. Your program will then output the appropriate classification, as indicated above.

Programming Problem:

Input: A non-negative integer less than 200 and

on the following input line: a string, either MPH or KNOTS.

Output: The Beaufort Scale Classification as shown in the examples below.

Example 1: Input: 0 Example 4: Input: 63 MPH

Output: CALM Output: STORM

Example 2: Input: 55 Example 5: Input: 110

MPH KNOTS

Output: STORM Output: HURRICANE

Example 3: Input: 63

KNOTS

Output: VIOLENT-STORM