



LABORATORY ACTIVITY #6
ELEC1: COMPUTATIONAL SCIENCE

Date: December 10, 2024

Class/Section: 2nd Year / Bscs C2022

Name: Alingcomot, Liezel Anne P.

Student No.: 21-02997

Score:

Name: Fajarillo, Jaira Q.

Student No.: 21-03015

Name: Repulles, Karyle Scott

Student No.: 21-02972

GENERAL INSTRUCTIONS: Read, understand and provide the needed requirements. Upload in our GClass with the filename: SURNAME1_SURNAME2_SURNAME3_LABACT6.pdf ONLY ONE WILL SUBMIT.

Seatwork: Grouped Frequencies Distribution

Maximum Wind Speeds The data show the maximum wind speeds in miles per hour recorded for 40 states. Construct a frequency distribution using 7 classes.

59	78	62	72	67
76	92	77	64	83
64	70	67	75	75
78	75	71	72	93
68	69	76	72	85
64	70	77	74	72
53	67	48	76	59
87	53	77	70	63

Source: NOAA

Solutions:

Range = Maximum Value – Minimum Value

Width = Range / Number Of Classes

Range = 93 – 48

Width = 45 / 7

Range = 45

Width= 6.43 (7 round up)

LOWER CLASS LIMIT

$48 + 7 = 55$
 $55 + 7 = 62$
 $62 + 7 = 69$
 $69 + 7 = 76$
 $76 + 7 = 83$
 $83 + 7 = 90$

UPPER CLASS LIMIT

$55 - 1 = 54$
 $54 + 7 = 61$
 $61 + 7 = 68$
 $68 + 7 = 75$
 $75 + 7 = 82$
 $82 + 7 = 89$
 $89 + 7 = 96$

Class Boundaries Lower Class Boundaries	Upper Class Limit
$48 - .5 = 47.5$	$54 + .5 = 54.5$
$55 - .5 = 54.5$	$61 + .5 = 61.5$
$62 - .5 = 61.5$	$68 + .5 = 68.5$
$69 - .5 = 68.5$	$75 + .5 = 75.5$
$76 - .5 = 75.5$	$82 + .5 = 82.5$
$83 - .5 = 82.5$	$89 + .5 = 89.5$
$90 - .5 = 89.5$	$96 + .5 = 96.5$

Requirements: Complete the table below and answer the range and width show your solution

Class	Class Boundaries	Tally	Frequency (f)	Cumulative Frequency (cf)
48-54	47.5 – 54.5	III	3	3
55-61	54.5 – 61. 5	II	2	5
62-68	61.5 – 68.5	IIII - II	7	12
69-75	68.5 – 75.5	IIII - IIII - II	12	24
76-82	75.5 – 82.5	IIII - II	7	31
83-89	82.5 – 89.5	IIII	4	35
90-96	89.5 – 96.5	II	2	37

= 30

- (a) Range: 45
- (b) Width: 6.43 (7 round up)