Midterm Skill Test						
Course Code: CPE 201L	Program: BSCPE					
Course Title: Data Structure and Algorithm	Date Performed: September 6, 2025					
Section: 2 - B	Date Submitted: September 6, 2025					
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1.Objectives

Implement on array integers less than 50 but not less than 20 and do the following operations

- A, Display the elements
- B. Count the number of elements
- C. Count the number of Odd and Even Integers

2. Discussion

The task was to use numbers that are **20 or more but less than 50**. So I created an array with numbers from 20 to 49.

Discuss here the relevant concepts of the activity in your own words.

First, I displayed all the elements using a loop so I could also show their index (or position in the array).

Next, I counted how many numbers were in the array using the len() function.

After that, I counted how many of the numbers were odd or even.

3. Materials and Equipment

What materials did you use? Explain in detail.

-Python

-Google Colab

4. Procedure

What are the procedures that you performed?

Procedure

- 1. Create an array of integers from 20 to 49.
- 2. Display the array elements.
- 3. Count the number of elements using len().
- 4. Loop through the array:
- element % 2 == 0, increment even counter.
- Else, Add one to the odd counter.
- 5. Print the counts for even and odd numbers.

5. Output

Screenshot of your outputs based on the procedures.

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Array Elements with Index:
Index 0: 20
Index 1: 21
Index 2: 22
Index 3: 23
Index 4: 24
Index 5: 25
Index 6: 26
Index 7: 27
Index 8: 28
Index 9: 29
Index 10: 30
Index 11: 31
Index 12: 32
Index 13: 33
Index 14: 34
Index 15: 35
Index 16: 36
Index 17: 37
Index 18: 38
Index 19: 39
Index 20: 40
Index 21: 41
Index 22: 42
Index 23: 43
Index 24: 44
Index 25: 45
Index 26: 46
Index 27: 47
Index 28: 48
Index 29: 49
Total Number of Elements: 30
Number of Even Integers: 15
Number of Odd Integers: 15
```

6. Conclusion

In this activity, I made an array of numbers from 20 to 49. I showed each number with its index, counted how many numbers there were, and checked which ones were odd or even.

Criteria	Ratings									Pts	
SO 7 PI 1 Student Outcome 7.1 Acquire and apply new knowledge from outside sources. threshold: 4.8 pts	6 pts Excellent Educational interests and pursuits exist and flourish outside classroom requirements, knowled and/or experiences are pursued independent and applies knowledg learned into practice	interests and exist and floutside cladge requiremente and/or exply pursued in	nd pursuits ourish	onal Satisfactory Unsursuits Look beyond Be Classroom Iool Classroom Iool Classroom Iool Classroom Iool Classroom Iool Classroom Iool Iool		3 pts Unsatisfactory J Begins to look beyond classroom requirements, showing interest in pursuing knowledge independently		2 pts Poor Relies on classroom instruction only		1 pts Very Poor No initiative or interest in acquiring new knowledge	6 pts
Student Outcome 7.2 Learn independently threshold: 4.8 pts	6 pts Excellent Completes an assigned task independently and practices continuous improvement	5 pts Good Completes an assigned task without supervision or guidance	4 pts Satisfactory Requires minimal guidance to complete an assigned task			y iled ep	Poor Shows little interest to complete a task		1 pts Very Poor No interest to complete a task independently		6 pts
Student Outcome 7.3 Critical thinking in the broadest context of technological change threshold: 4.8 pts	6 pts Excellent Synthesizes and integrates information from a variety of sources; formulates a clear and precise perspective; draws appropriate conclusions	5 pts Good Evaluate information from a variety of sources; formulates a clear and precise perspective.	4 pts Satisfactory Analyze information from a variet sources; formulates a clear and precise perspective.		3 pts Unsatisfac Apply the gathered informatic formulate problem	on to	and so the in from source failed	es but of sources to late the		Yery Poor Sather Information From a variety	6 pts
Student Outcome 7.4 Creativity and adaptability to new and emerging technologies threshold: 4.8 pts	6 pts Excellent Ideas are combined in original and creative ways in line with the new and emerging technology trends to solve a problem or address an issue.	5 pts Good Ideas ar creative and adapt the new knowledge to solve a probler or address an issue	Ideas are creative in solving a	or	3 pts Unsatisfactor Shows some creative ways solve the pro		ini att em de cre	ots or Shows tiative and empt to velop eative ideas solve the oblem	V lo	pts fery Poor deas are opied or estated from he sources onsulted	6 pts