

ARTICLE TITLE

MURAT SARI^{1*}  AND TAHIR COSGUN²  AND HANDE USLU¹ ¹ *Department of Mathematics, Yildiz Technical University, Istanbul, Turkey*² *Department of Mathematics, Amasya University, Amasya, Turkey*

ABSTRACT. The title must be sufficiently clarifying. Also, a running title must be included. The abstract must summarize the study. It should include less than 150 words, and it must not include any abbreviation or any citation. At least three keywords and at least two AMS subject classification (2010) codes must be given for indexing purposes.

Keywords: Keyword one; keyword two; keyword three.

AMS Subject Classification: 20AA35; 36BC81.

1. INTRODUCTION

Preliminary information and physical interpretation must be introduced in this section [1]. If necessary, additional sections and subsections can be added by using `section` or `subsection` commands of L^AT_EX.

2. MAIN RESULTS

Main derivations or calculations must be presented in here. If it is needed, this section can be modified or divided into subsections. Each lemma, proposition, theorem, corollary and remark must be enumerated in the following manner:

Lemma 2.1. *This is a lemma.*

Proposition 2.2. *This is a proposition.*

Theorem 2.3. *This is a theorem [2].*

Corollary 2.4. *This is a corollary.*

Remark 2.5. *This is a remark.*

Each of the lemmas, theorems, propositions, and corollaries must be coherent and consistent with the text. Theorems and equations must be enumerated within each section. Equations and inequalities must be aligned when it is needed.

3. APPLICATIONS AND ILLUSTRATIVE EXAMPLES

In this section some illustrative examples and potential application areas must be presented.

Example 3.1. *This is an example [3].*

$$\sum_{n=1}^{\infty} \frac{1}{n^2} = \frac{\pi^2}{6} \quad (3.1)$$

E-mail address: sarim@yildiz.edu.tr.

* Corresponding Author.

Captions of tables must be positioned at the top and captions of figures must be positioned at the bottom.

TABLE 1. AEs and REs for Example 3.1 with various values of x and t

x	t	AEs	REs
0.1	0.05	8.3E-09	1.7E-05
	0.10	1.2E-08	2.4E-05
	1.00	2.1E-08	4.1E-05
0.5	0.05	2.3E-08	4.5E-05
	0.10	3.3E-08	6.6E-05
	1.00	5.7E-08	1.1E-04
0.9	0.05	8.3E-09	1.7E-05
	0.10	1.2E-08	2.4E-05
	1.00	2.1E-08	4.1E-05

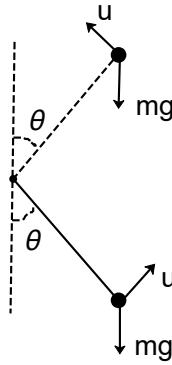


FIGURE 1. Equilibrium positions for a simple pendulum

Journal of Applied and Computational Sciences encourages the authors to put their **pseudocodes** or **algorithms** in the manuscript.

Algorithm 1 My algorithm

```

1: procedure MYPROCEDURE
2:    $stringlen \leftarrow \text{length of } string$ 
3:    $i \leftarrow patlen$ 
4: top:
5:   if  $i > stringlen$  then return false
6:    $j \leftarrow patlen$ 
7: loop:
8:   if  $string(i) = path(j)$  then
9:      $j \leftarrow j - 1$ .
10:     $i \leftarrow i - 1$ .
11:    goto loop.
12:  close;
13:   $i \leftarrow i + \max(delta_1(string(i)), delta_2(j))$ .
14:  goto top.
```

4. CONCLUSION

The conclusion must summarize the study in a holistic approach. Important implications and possible applications must be cited in this section. Any further recommendations or advice for academic society should be given in this section.

Acknowledgement. The authors would like to thank the anonymous reviewers for their valuable comments and suggestions for improving the paper.

Authors Contribution Statement. All authors conceived of the presented idea. x, developed the study, performed the computations. Y, verified the methods and investigated results. Y also supervised and edited all the findings of this work. Both of the, designed the draft manuscript. All authors discussed the results and contributed to the final manuscript.

Declaration of Competing Interests. The authors declare that they have no known financial interests or personal relationships that conflict with each other affecting the study reported in this article.

For references, *JOFACS* uses an internal bibliography. Citations must be as in this style [1, 2, 3]. In the text, references must be cited in an increasing order. Besides, any reference cited in the text must be cited in the bibliography, and vice versa.

REFERENCES

- [1] M.Sari, *Some Numerical Methods*, Journal of Applied and Computational Sciences, (1) 1-18, 2020.
- [2] R. F. Churchhouse, *Handbook of Applicable Mathematics*, Wiley, New York, 1981.
- [3] L. M. Delves and J. Walsh, *Numerical Solution of Integral Equations*, Oxford University Press, London, 1974.

If any, appendices must be placed after the references. Any supplementary material or software code should be given in this part. If it is not necessary, you can delete this part.

APPENDIX A. BINOMIAL COEFFICIENTS

Theorem A.1 (Binomial coefficients). *For any $n, k \in \mathbb{N}$ with $k \leq n$ the binomial coefficients can be computed as*

$$\binom{n}{k} = \frac{n!}{(n-k)!k!}. \quad (\text{A.1})$$

APPENDIX B. BINOMIAL THEOREM

Theorem B.1 (Binomial theorem). *For any $x, y \in \mathbb{R}$ and $n \in \mathbb{N}$ the following equality holds*

$$(x + y)^n = \sum_{k=0}^n \binom{n}{k} x^{n-k} y^k. \quad (\text{B.1})$$