



**SDI Review Form 1.6**

Journal Name:	<a href="#">Current Journal of Applied Science and Technology</a>
Manuscript Number:	<b>Ms_CJAST_48584</b>
Title of the Manuscript:	<b>A Note on Branch and Bound Algorithm for Integer Linear Programming</b>
Type of the Article	

**General guideline for Peer Review process:**

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound. To know the complete guideline for Peer Review process, reviewers are requested to visit this link:

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**PART 1: Review Comments**

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
<b>Compulsory</b> REVISION comments	<ol style="list-style-type: none"> <li>Line 77: Take out from the model <math>b \in \mathbb{R}^m</math> ... <b>and</b> replace <math>b \in \mathbb{R}^m</math> by <math>b \in \mathbb{Z}^m</math> and <math>A \in \mathbb{R}^{m \times n}</math> by <math>A \in \mathbb{Z}^{m \times n}</math>.</li> <li>Line 80: same remark.</li> <li>Mathematical expressions must be correctly written throughout the paper.</li> <li>No numerical example is given.</li> <li>No comparative study is made with the 2-phase simplex method to judge the performance of the new method.</li> </ol>	<ol style="list-style-type: none"> <li>Not agreed. In integer programming problem it is not necessary that all the coefficients are integer.</li> <li>Not agreed.</li> <li>Corrected</li> <li>, 5. Not agreed. This method is actually superior to phase 1 simplex method. Performance wise dual simplex and this method are almost equivalent. For comparative study with phase 1 simplex references are already given.</li> </ol>
<b>Minor</b> REVISION comments	<ol style="list-style-type: none"> <li>In keywords replace "dual simplex" by "dual simplex algorithm" and "2-phase simplex" by "two-phase simplex method".</li> <li>Move line 81 to line 78</li> <li>Lines 82, 83 and 84: rewrite correctly the set <math>\{1, 2, \dots, K, \dots, n\}</math></li> <li>Lines 93, 94 and 95: replace <math>\mathbb{R}^B</math> by <math>\mathbb{R}^{ B }</math>, <math>\mathbb{R}^N</math> by <math>\mathbb{R}^{ N }</math> and <math>\mathbb{R}^{B \times N}</math> by <math>\mathbb{R}^{ B \times N }</math> respectively</li> <li>Line 104: "Each branch is again treated <b>in</b> the same way as the original"</li> <li>Line 113: replace Y by U in <math>B := (B \cup \{k\}) \setminus \{r\}</math></li> <li>Line 114: replace Y by U in <math>N := (N \cup \{r\}) \setminus \{k\}</math></li> <li>Line 120: replace <math>\phi</math> by <math>\emptyset</math></li> <li>Line 122: replace <math>\mathbb{R}^N</math> by <math>\mathbb{R}^{ N }</math>, add <math>s \in S</math> in the sum and remove the parentheses</li> <li>Line 123: <math>K = \emptyset</math></li> <li>Line 128 and 130: replace Y par U</li> <li>Line 150: delete in</li> </ol>	<ol style="list-style-type: none"> <li>Corrected</li> <li>Not agreed. Line 81 is derived from line 78</li> <li>Not agreed. Set is already written correctly.</li> <li>Not agreed. It is a modern notation showing not only dimension but also coordinate axes of R. it is already used by several authors in linear programming.</li> <li>Corrected</li> <li>6,7 : Its an issue of your Ms Word . in the actual file it is already correct.</li> <li>Corrected</li> <li>Corrected</li> <li>corrected</li> <li>it is an issue of your ms word on your computer.</li> <li>corrected</li> </ol>
<b>Optional/General</b> comments	<p>In this work, the authors have replaced the dual simplex method with another method that exists in the literature, in the branch and bound method applied to linear programming in integers. So, no originality in this work.</p> <p>The paper would gain in substance and clarity if it is well presented.</p>	

**PART 2:**

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
Are there ethical issues in this manuscript?	(If yes, Kindly please write down the ethical issues here in details)	