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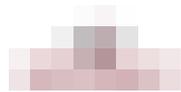
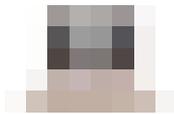
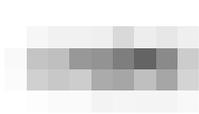
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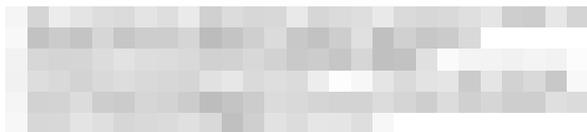
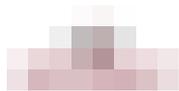
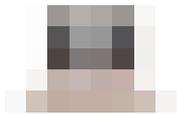
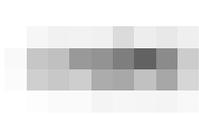
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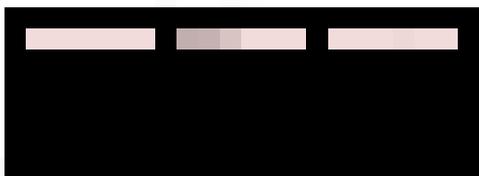
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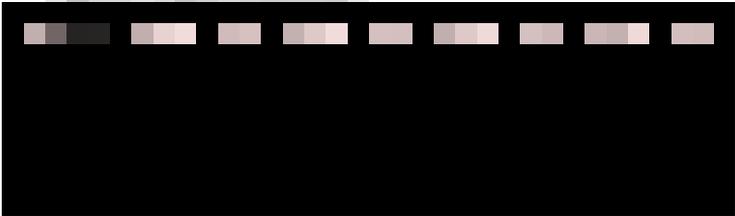
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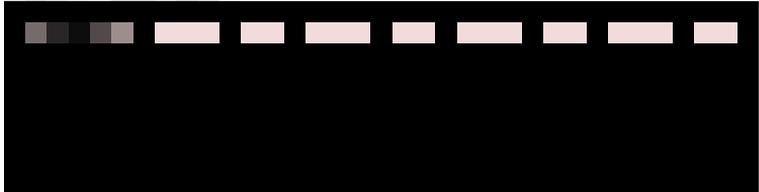

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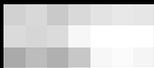
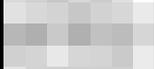
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## SECTION 1









Section 1

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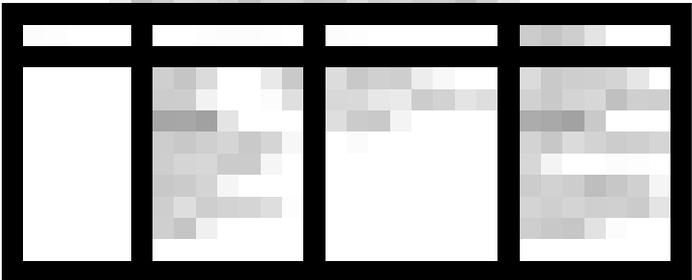
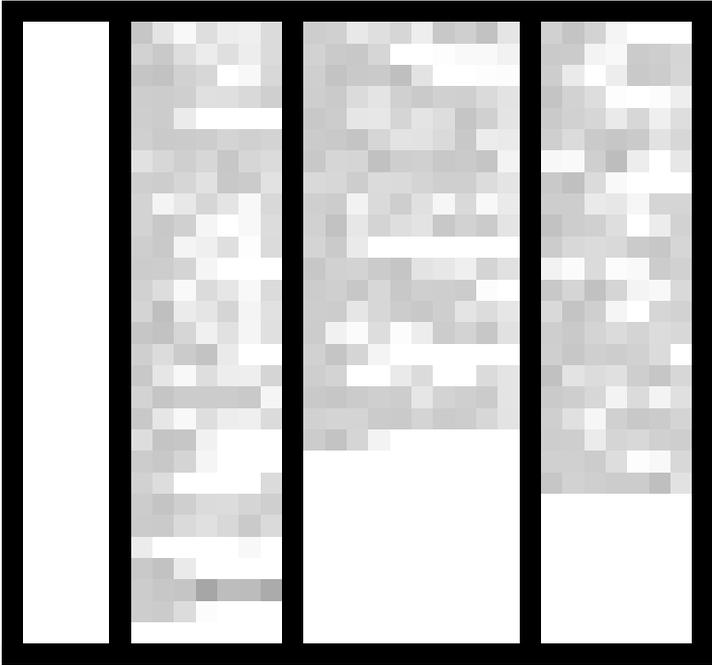
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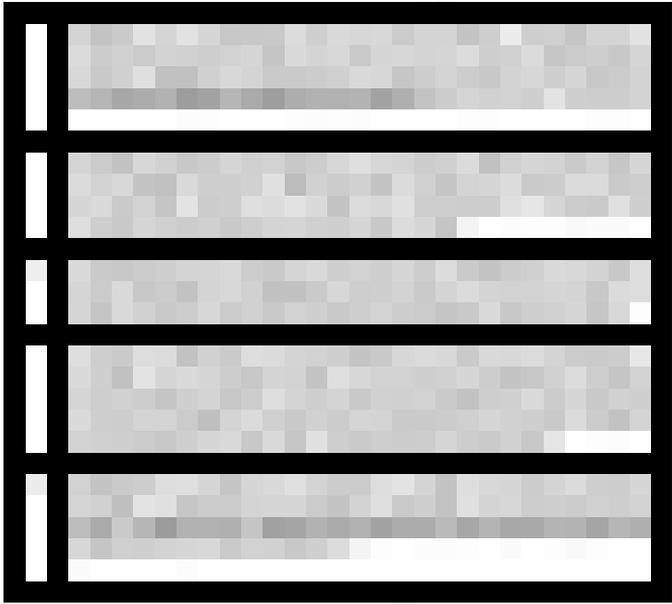
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1. Introduction

The first paragraph of the text discusses the importance of understanding the underlying principles of the system being studied. It highlights the need for a comprehensive approach that considers both theoretical and practical aspects. The text emphasizes that a solid foundation in the subject matter is essential for developing effective solutions and strategies.

The second paragraph delves into the specific challenges and complexities associated with the task at hand. It identifies key areas where further research and innovation are required to overcome existing limitations. The author stresses the importance of collaboration and interdisciplinary efforts in addressing these challenges.

The third paragraph outlines the methodology and approach used in the study. It details the various techniques and tools employed to gather data and analyze results. The author provides a clear and concise overview of the experimental design and the steps taken to ensure the reliability and validity of the findings.

2. Methodology

The methodology section describes the specific procedures and protocols followed during the study. It includes details about the data collection process, the analysis techniques used, and the criteria for evaluating the results. The author provides a thorough and systematic account of the research process, ensuring that the study can be replicated and its findings verified.

3. Results

The results section presents the findings of the study, highlighting the key observations and trends. It includes a detailed analysis of the data and a discussion of the implications of the findings. The author provides a clear and concise summary of the results, supported by relevant evidence and data.

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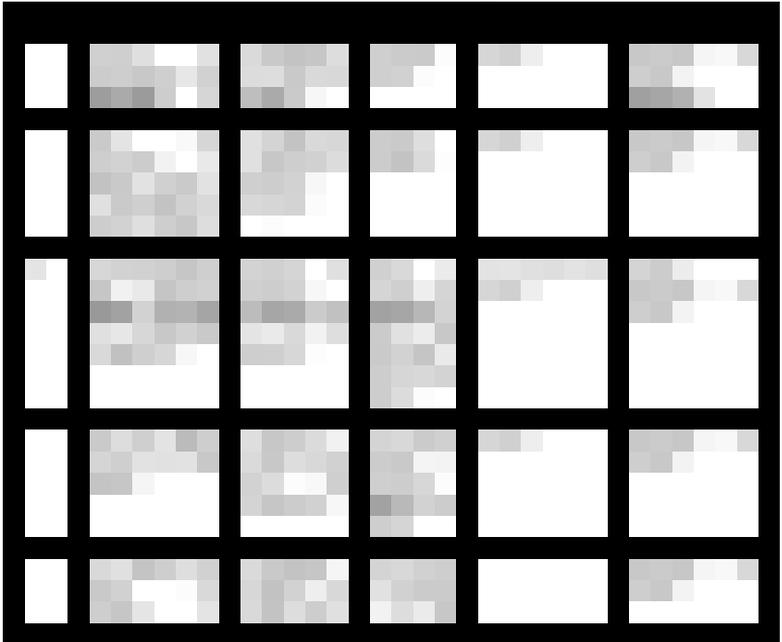
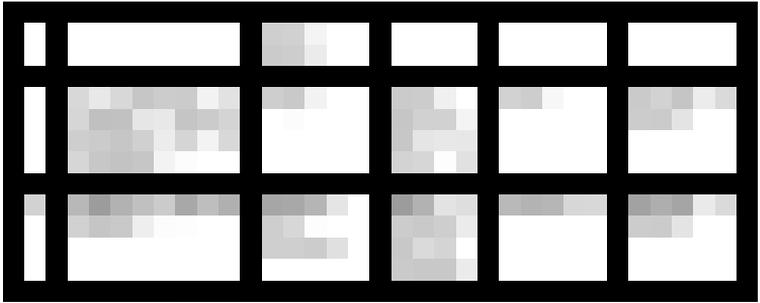
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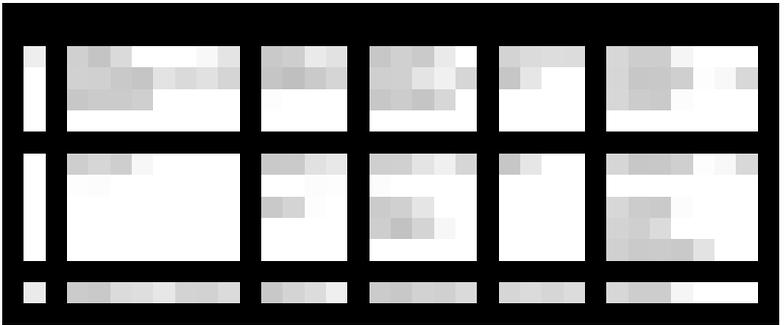
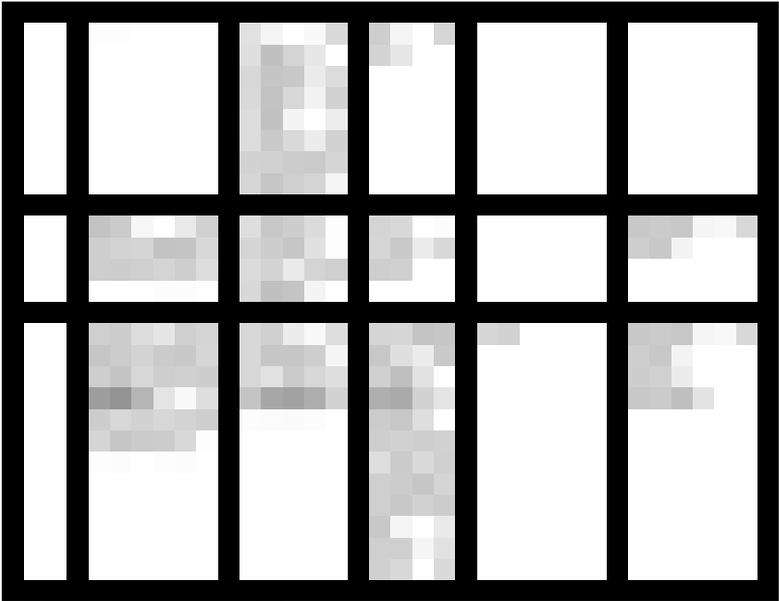
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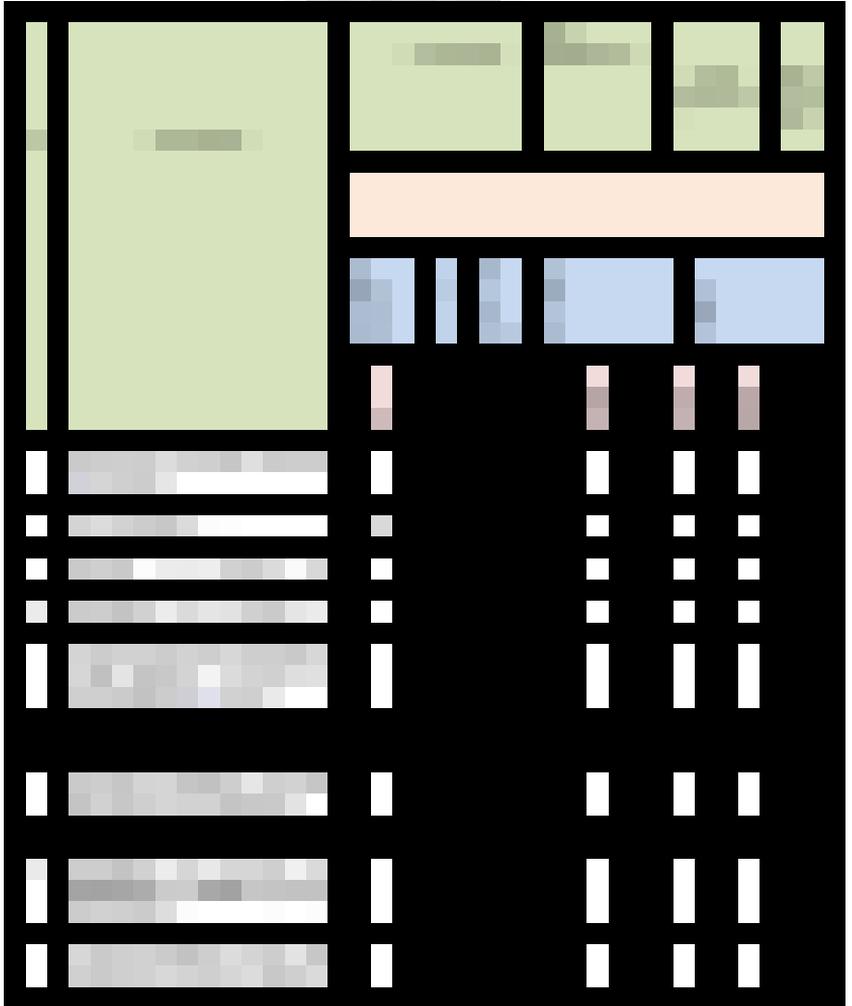
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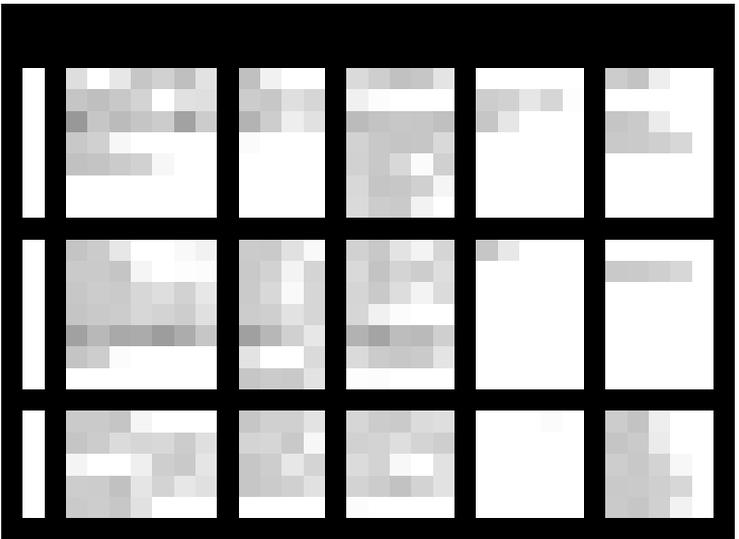
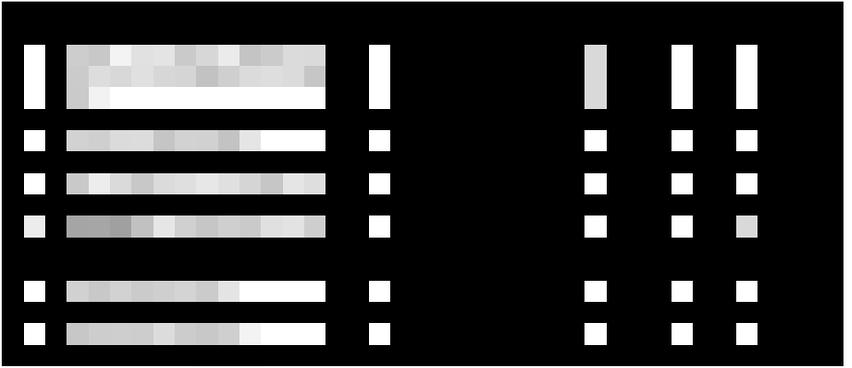
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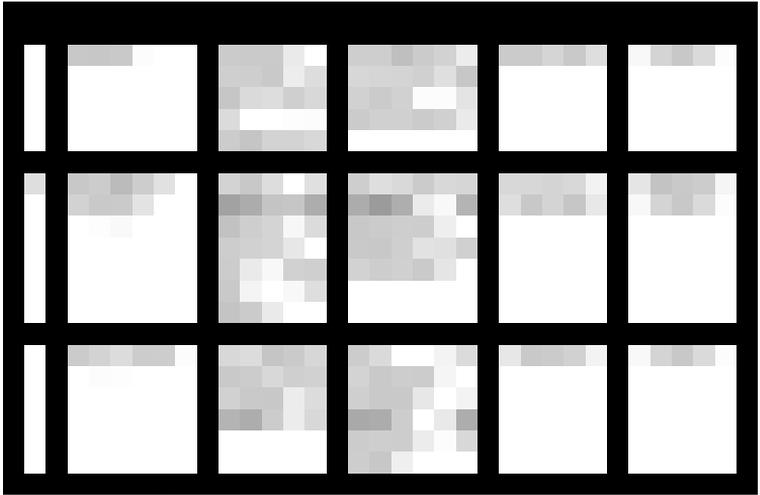








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## CHAPTER 1

1.1. Introduction to the course and the role of mathematics in science and engineering.

1.2. The real number system and its properties.

1.3. The complex number system and its properties.

1.4. The vector space structure of  $\mathbb{R}^n$  and  $\mathbb{C}^n$ .

1.5. The inner product structure of  $\mathbb{R}^n$  and  $\mathbb{C}^n$ .

1.6. The orthogonal and unitary transformations.

1.7. The eigenvalue and eigenvector problem.

1.8. The Jordan canonical form.

1.9. The matrix exponential function.

1.10. The Laplace transform.

1.11. The Fourier transform.

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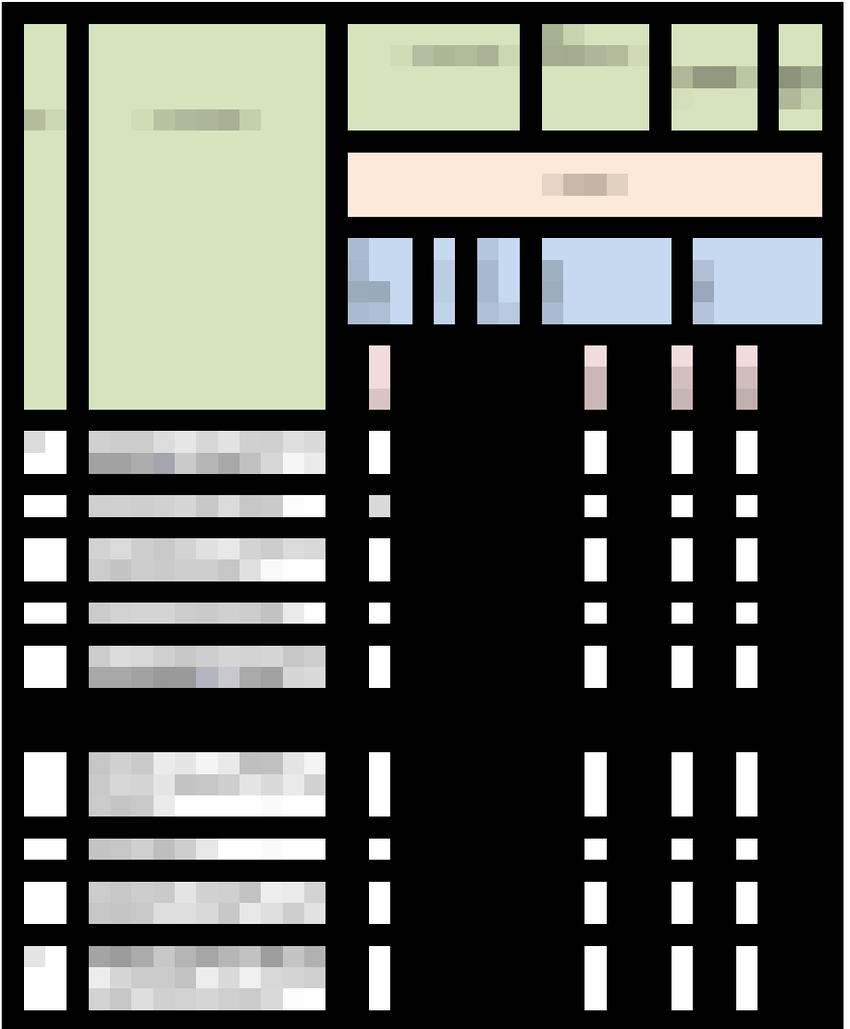
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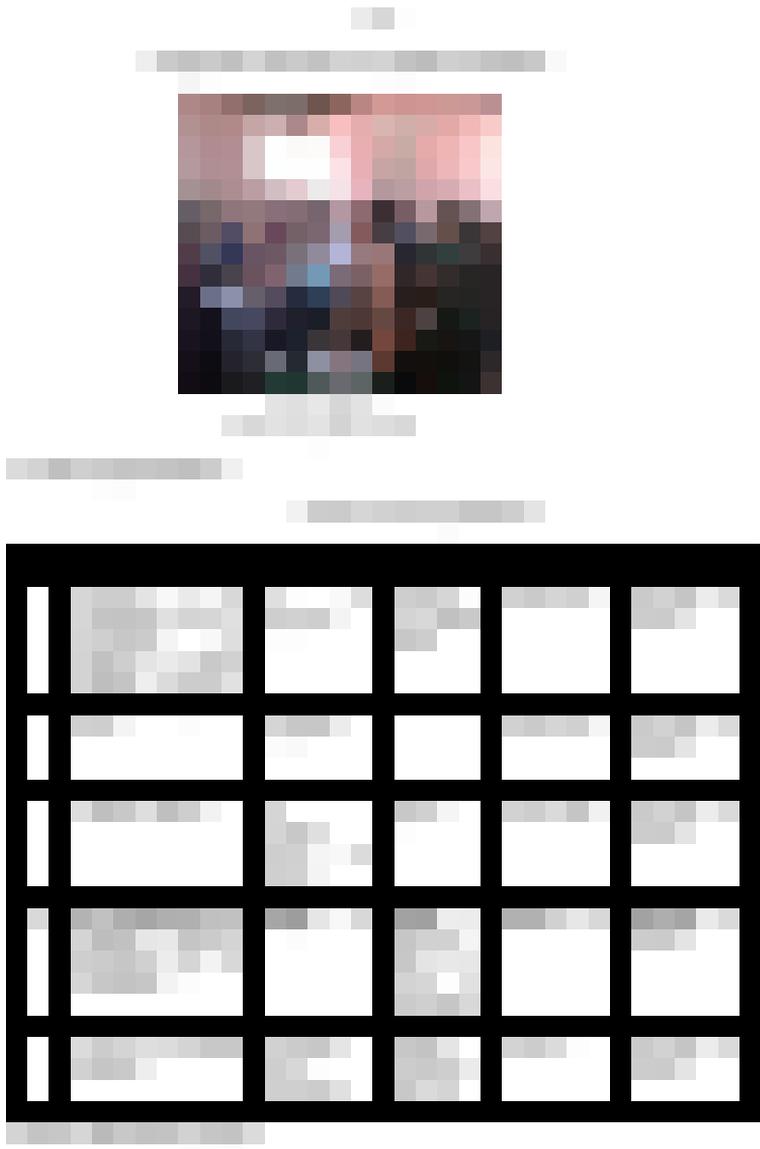
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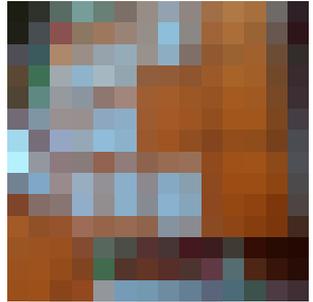


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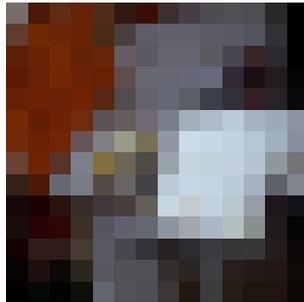
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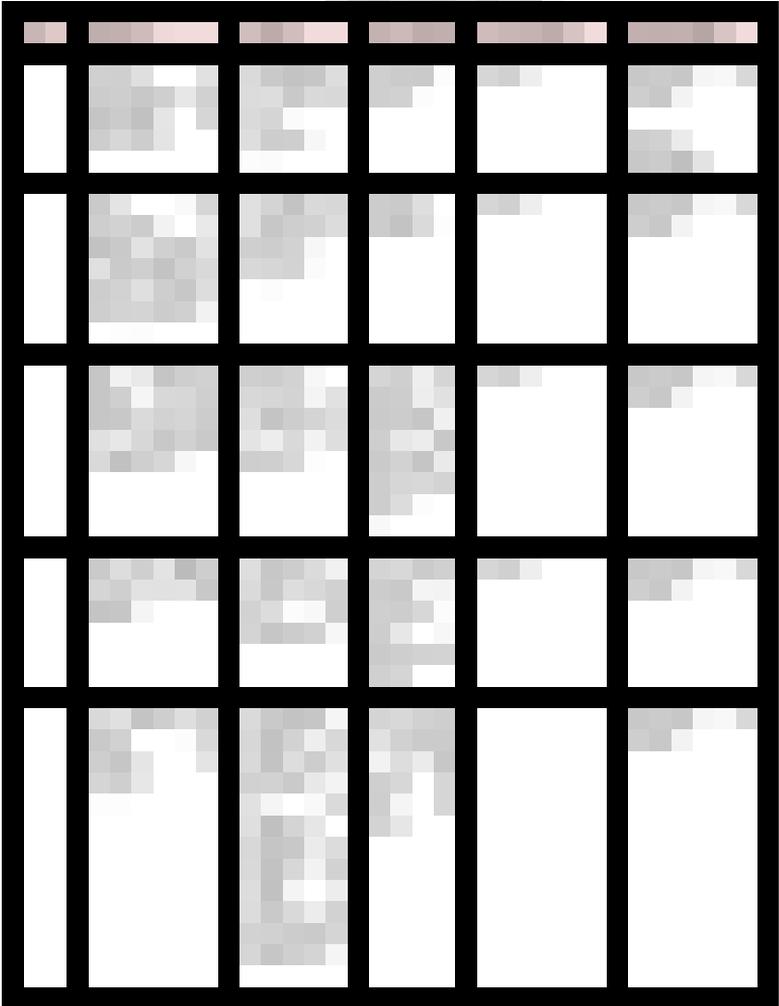
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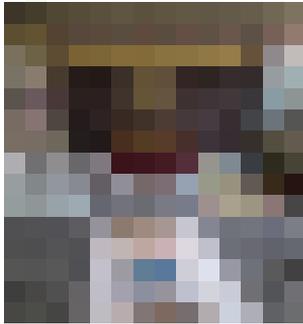
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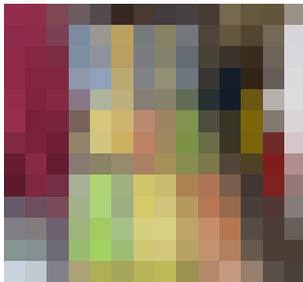
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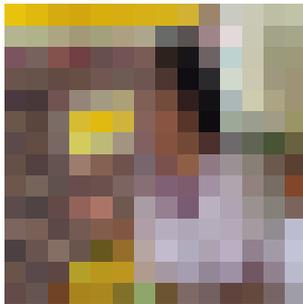
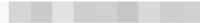
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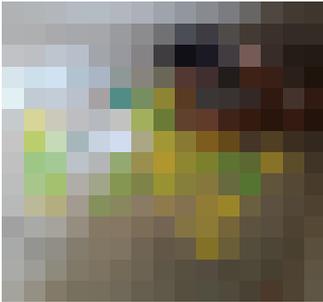


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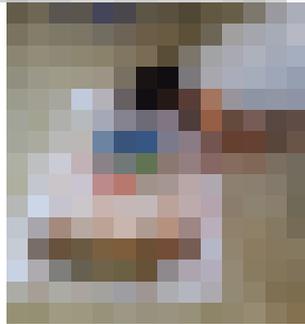
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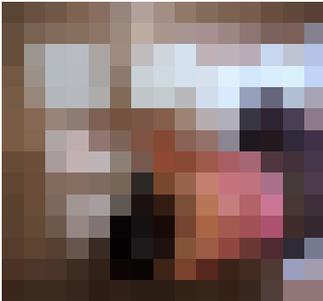
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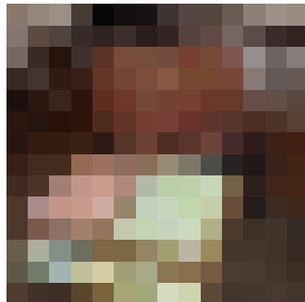
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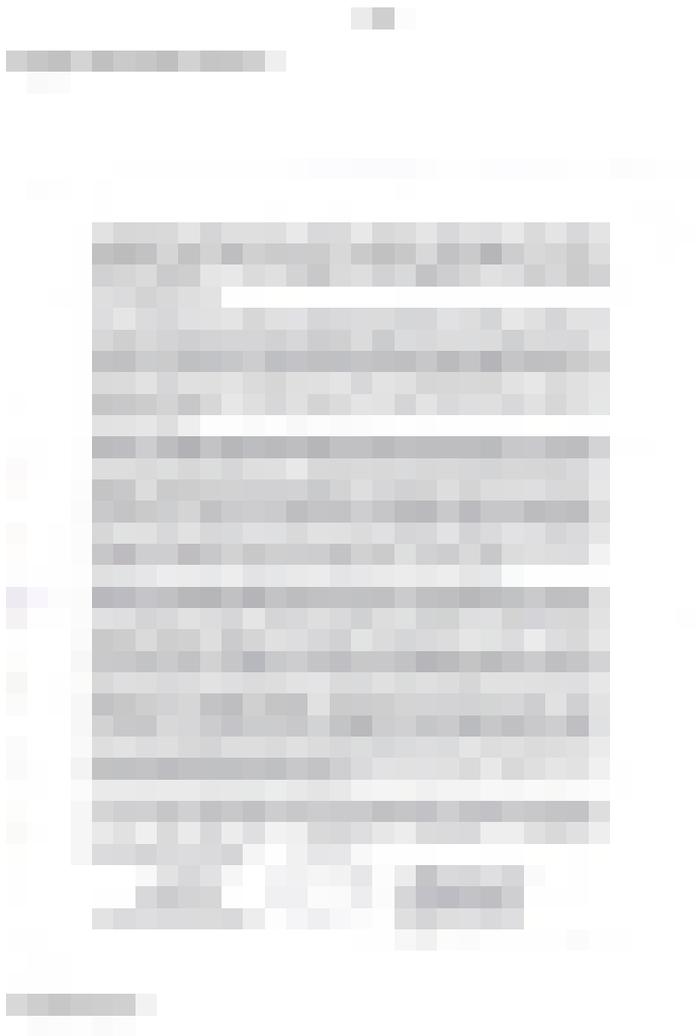


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Section 1

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CHAPTER 1

The first part of the book discusses the history of the field.

It then moves on to a discussion of the current state of the field.

The next section discusses the challenges facing the field.

Finally, the book concludes with a discussion of the future of the field.

The book is written in a clear and concise style.

It is suitable for both students and researchers.

The book is a valuable resource for anyone interested in the field.

It provides a comprehensive overview of the field.

The book is well organized and easy to read.

It is a must-read for anyone in the field.

The book is a great introduction to the field.

It is a well-written and informative book.

The book is a great resource.

It is a well-written and informative book.

The book is a great resource for anyone interested in the field.

It provides a comprehensive overview of the field.

The book is well organized and easy to read.

It is a must-read for anyone in the field.

The book is a great introduction to the field.

It is a well-written and informative book.

The book is a great resource.

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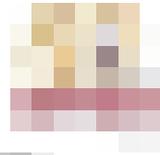
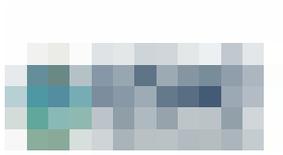
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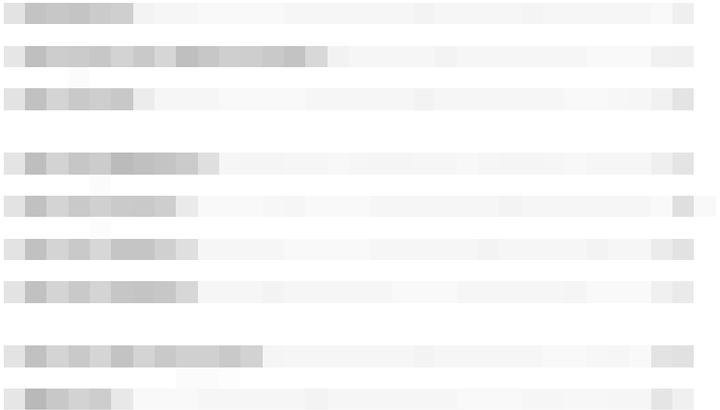
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Section 1

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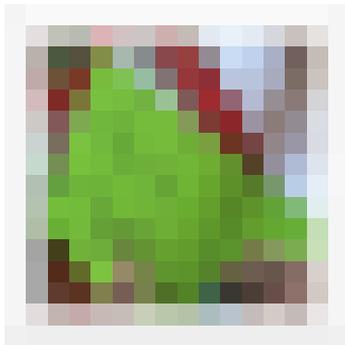
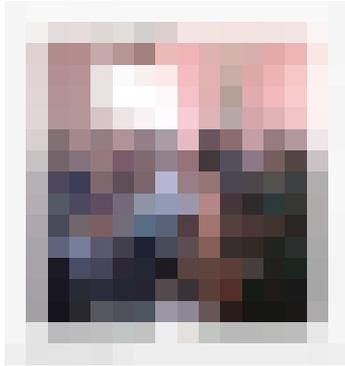


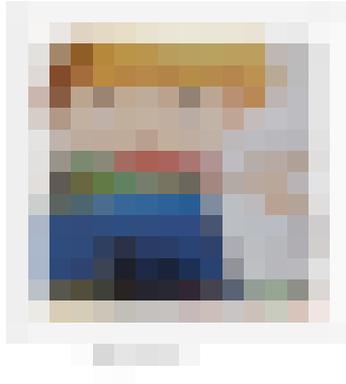
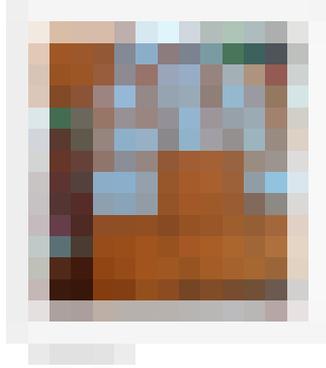
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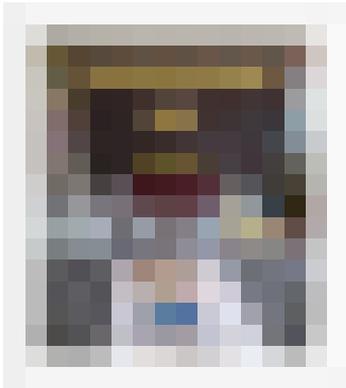
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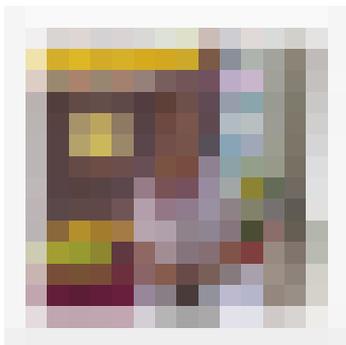
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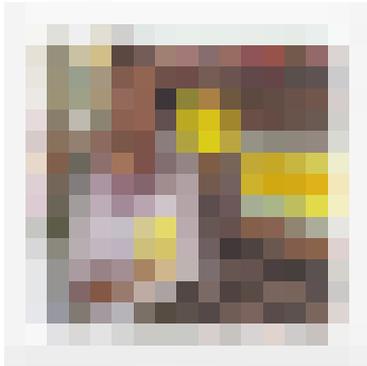
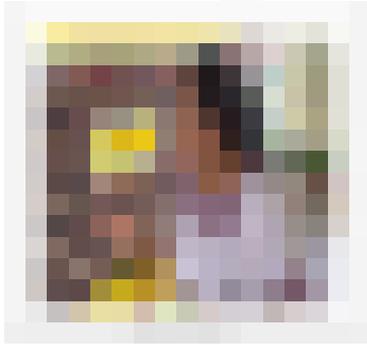


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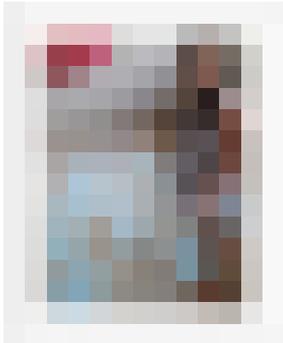






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