NAME : Vutshila  
SURNAME : Mashimbyi   
STUDENT No. : 2562071

1).

1. Supervised learning
2. Reinforcement learning
3. Supervised learning
4. Supervised learning
5. Supervised learning
6. Supervised learning
7. reinforcement learning
8. supervised learning

2).

. **Ethical Considerations:** While recommendation systems offer convenience and personalized experiences, there are concerns regarding user privacy, algorithmic bias, and the potential for filter bubbles (where users are only exposed to content that aligns with their existing preferences).

**Continuous Improvement:** Companies continually refine their recommendation algorithms through A/B testing, user feedback, and incorporating new data sources to enhance accuracy and relevance.

3).

. **Improved Marketing Strategies:** Customer segmentation enables businesses to understand their customers' needs and preferences more effectively, leading to targeted marketing efforts and improved ROI.

**Data-Driven Insights:** Unsupervised learning algorithms uncover hidden patterns and structures in large datasets, providing valuable insights that may not be apparent through manual analysis.

4).