1. **Title of the Practice:** Database of drawings, Thesis reports, NASA documentaries, Research Articles etc.

2. **Objectives of the Practice:** The objective of creating a database for drawings, thesis reports, NASA documentaries, research articles, and similar materials is to provide a centralized, organized platform that enables easy access, search, and retrieval of valuable academic and scientific content. It aims to support research, education, and collaboration by offering curates collection of resources across multiple disciplines. The database will preserve important documents, foster knowledge sharing, and facilitate interdisciplinary insights. Additionally, it will assist users in finding credible references, promoting innovation, and contributing to the long-term development of academic and scientific fields.

3. **The Context:** There are several obstacles to overcome while building a database for research publications, thesis reports, architectural blueprints, and NASA documentaries. First, the different formats—drawings could be CAD files, whereas reports and articles are either text-based or multimedia—cause data heterogeneity. Since uniform tagging is necessary for efficient search and retrieval across fields, metadata standardization is both crucial and complicated. Another difficulty is ensuring data validity and copyright compliance, particularly for private research or sensitive NASA content. Scalability and storage must support increasing data volumes and high-resolution files. Advanced algorithms are also needed to integrate a strong search engine that can handle complex queries, such as technical keywords or design factors. Controlling user access is essential for striking a balance between secrecy and open sharing.
   Lastly, a sustainable infrastructure is necessary for long-term data preservation, guaranteeing accessibility even in the face of changing hardware and software. An interdisciplinary strategy integrating technology, archiving, and legal knowledge is required to address these issues.

4. **The Practice:** In the context of higher education, creating a comprehensive database of architectural drawings, thesis reports, NASA documentaries, and research articles represents a significant innovation. Unlike traditional library systems, this practice integrates interdisciplinary and multimedia resources into a centralized repository. Its uniqueness lies in addressing the distinct needs of architecture, science, and research disciplines simultaneously. Architectural drawings require advanced visual formats (e.g., CAD files), while research articles and NASA documentaries demand text and multimedia organization. Moreover, digitization of academic work, especially thesis reports, preserves the intellectual legacy of Indian institutions, ensuring long-term availability and reuse.
   Constraints and Limitations: Although the project has a lot of potential, there are a number of obstacles in higher education system.

a) **Technological Infrastructure:** Institution little lack the advanced IT infrastructure required for storing and accessing large volumes of data, particularly for high-resolution architectural drawings and multimedia files.

b) **Copyright and Legal Restrictions**: Obtaining permissions to include proprietary research articles and NASA content is complex, involving legal compliance and licensing fees.
c) **Data Authenticity and Security**: Strong verification procedures and cyber security measures are necessary to guarantee the security and correctness of contributions, especially student thesis reports.

5. **Evidence of Success:** The effectiveness of this practice is reflected in the achievements of students:
    a) **Mohit bansal** from the 10th semester (2019 batch) secured commendable NASA India Thesis Grants Award in May 2024.
    b) **Charlina J. Dutta** from the 9th semester (2019 batch) got Best Studio Project in North region award from Transparence in November 2023.

6. **Problems Encountered and Resources Required:**
    a) Ensuring all students maintain high-quality output in their Research projects.
    b) Limited awareness and exposure among students in earlier semesters regarding research methodologies and potential publication avenues.
    c) The need for extensive faculty involvement, which demands additional time and effort.
    d) Lack of awareness among some students regarding the importance of Research work, documentation work and competitions.

Resources Required:

a) **Infrastructure:** Well-equipped computer labs and access to software/tools for conducting advanced research.
b) **Mentorship Programs:** Faculty training programs to enhance their capacity to guide undergraduate and post graduate research.
c) **Funding Support:** Financial resources to cover costs related to journal publications, conferences, and project materials.