TASK NO: 5

TASK NAME: **Data Science Ethics Discussion**

**Data Privacy & Security**

Data privacy and security are critical ethical concerns in data science, as organizations collect and analyze vast amounts of personal data from users. This data includes sensitive information such as financial transactions, medical records, browsing history, and social interactions. If not handled responsibly, it can be exploited for unauthorized surveillance, identity theft, or targeted manipulation. Many companies store and process user data without clear consent, raising concerns about transparency and ethical responsibility. Additionally, data breaches and cyberattacks can expose personal information, leading to severe consequences for individuals. To address this issue, organizations must implement strict data protection policies, encryption techniques, anonymization methods, and adhere to legal frameworks like GDPR(General Data Protection Regulation) and CCPA(California Consumer Privacy Act). Ethical data handling ensures that users maintain control over their personal information, fostering trust and preventing misuse in an increasingly data-driven world.