Rodrigo Brasil 11/2023

1. From your day to day computer use, provide examples of when data is at rest and when it is in transit.
   1. From my day to day computer use, an example of data at rest would be the documents being stored on my hard drive or external hard drive and for data in transit would be accessing youtube with a browser.
2. Explain the role of data encryption with regards to the CIA triad.
   1. CIA triad:
   2. Confidentiality: It involves the process of converting plaintext (unencrypted data) into ciphertext (encrypted data) using an algorithm and a cryptographic key. Only those with the appropriate decryption key can convert the ciphertext back into plaintext and access the original information.
   3. Integrity: Encryption helps maintain data integrity by protecting it from unauthorized modifications. This means any attempt to tamper with the encrypted information will likely result in the decryption process failing.
   4. Availability: By preventing unauthorized access and maintaining data integrity, encryption helps ensure that information remains accessible to legitimate users.