**Q1. What is Middleware in Express.js?**

**ANS: Express.js** is a routing and Middleware framework for handling the different routing of the webpage and it works between the request and response cycle.

**Q2. What is json web tokens?**

**ANS:** A JSON web token (JWT) is *JSON Object* which is used to securely transfer information over the web (between two parties). It can be used for an authentication system and can also be used for information exchange.

**Q3. What is different between encryption and hashing.**

**ANS:**

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| **Basis** | **Hashing** | **Encryption** |
| **Definition** | It is a process to convert information to a shorter fixed value known as the key that is used to represent the original information. | It is the process to encode data securely such that only the authorized user who knows the key or password is able to retrieve the original data for everyone else it is just garbage. |
| **Purpose** | The purpose of hashing is indexing and retrieving items from the database. The process is very fast. | The purpose of encryption is to transform data to keep it secret from others. |
| **Secure** | It is more secure in comparison to encryption. | It is less secure in comparison to hashing. |
| **Output** | The output of a hashing algorithm is a fixed-size hash value | the output of an encryption algorithm is ciphertext of the same size or larger than the original data |
| **Length of information** | The hashed information is generally of small and fixed length. It does not grow with the increase in the information length of information. | The encrypted information is not of fixed length. It grows with the increase in length of information. |
| **key management** | Hashing does not require a secret key or algorithm to produce a hash value | encryption requires a secret key or algorithm to encrypt and decrypt data. |