QUESTION 3

Example 1

Encountered encryption/hashing method while building authentication system for a flask app. I used in to hash the password the user would use to log into the app and store in a database

In order to make the user information secure.

Scripts:

[Models.py](https://github.com/nevooronni/pitch-perfect/blob/master/app/models.py)  file where in the user model I used Flask’s Werkzeug’s security module which provides hashing functionality with 2 methods. -generating\_password\_hash- This function takes in a password and generates a password hash. -check\_password\_hash- This function takes in a hash password and a password entered by a user and checks if the password match the returns a True or False response.

I used the @property decorator to create a write only class property password. Sets this property then generate a password hash and pass the hashed password as a value to the pas\_secure column property to save to the database. Also wrote code to raise an AttributeError to block access to the password property. This is because it is not secure for users to have access to that property. Then created a method verify\_password that takes in a password hashes it and compared it to the hashed password to check if they are the same.

[Test\_user.py](https://github.com/nevooronni/pitch-perfect/blob/master/tests/test_user.py) Created a test file to test all of this. It ascertains when the password is being hashed and the pass\_secure contains a value. The second test case confirms that our application raises an AttributeError when we try and access the password property. The third test confirms that our password\_hash can be verified when we pass in the correct password.

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