Assignment - 2

1.Create a flask app with registration page, login page and welcome page. By default load the registration page once the user enters all the fields, store the data in the database and navigate to the login page to authenticate user username and password. If the user is valid show the welcome page

```python
# Store this code in 'app.py' file

from flask import Flask, render_template, request, redirect, url_for, session
from flask_mysqldb import MySQL
import MySQLdb.cursors
import re


app = Flask(_name_)


app.secret_key = 'your secret key'

app.config['MYSQL_HOST'] = 'localhost'
app.config['MYSQL_USER'] = 'root'
app.config['MYSQL_PASSWORD'] = 'your password'
app.config['MYSQL_DB'] = 'geeklogin'

mysql = MySQL(app)

@app.route('/')
@app.route('/login', methods =['GET', 'POST'])
def login():
        msg = ''
        if request.method == 'POST' and 'username' in request.form and 'password' in request.form:
                username = request.form['username']
                password = request.form['password']
                cursor = mysql.connection.cursor(MySQLdb.cursors.DictCursor)
                cursor.execute('SELECT * FROM accounts WHERE username = % s AND password = % s', (username, password, ))
                account = cursor.fetchone()
                if account:
                        session['loggedin'] = True
                        session['id'] = account['id']
                        session['username'] = account['username']
                        msg = 'Logged in successfully !'
                        return render_template('index.html', msg = msg)
                else:
```

```python
                    msg = 'Incorrect username / password !'


        return render_template('login.html', msg = msg)

@app.route('/logout')
def logout():
        session.pop('loggedin', None)
        session.pop('id', None)
        session.pop('username', None)
        return redirect(url_for('login'))


@app.route('/register', methods =['GET', 'POST'])
def register():
        msg = ''
        if request.method == 'POST' and 'username' in request.form and 'password' in
request.form and 'email' in request.form :
                username = request.form['username']
                password = request.form['password']
                email = request.form['email']
                cursor    =    mysql.connection.cursor(MySQLdb.cursors.DictCursor)
                cursor.execute('SELECT * FROM accounts WHERE username = % s',
(username, ))
                account = cursor.fetchone()
                if account:
                        msg = 'Account already exists !'
                elif not re.match(r'[^@]+@[^@]+\.[^@]+', email):
                        msg = 'Invalid email address !'
                elif not re.match(r'[A-Za-z0-9]+', username):
                        msg = 'Username must contain only characters and numbers !'
                elif not username or not password or not email:
                        msg = 'Please fill out the form !'
                else:
                        cursor.execute('INSERT INTO accounts VALUES (NULL, % s, % s,
% s)', (username, password, email, ))
                        mysql.connection.commit()
                        msg = 'You have successfully registered !'
        elif request.method == 'POST':
                msg = 'Please fill out the form !'
        return render_template('register.html', msg = msg
```