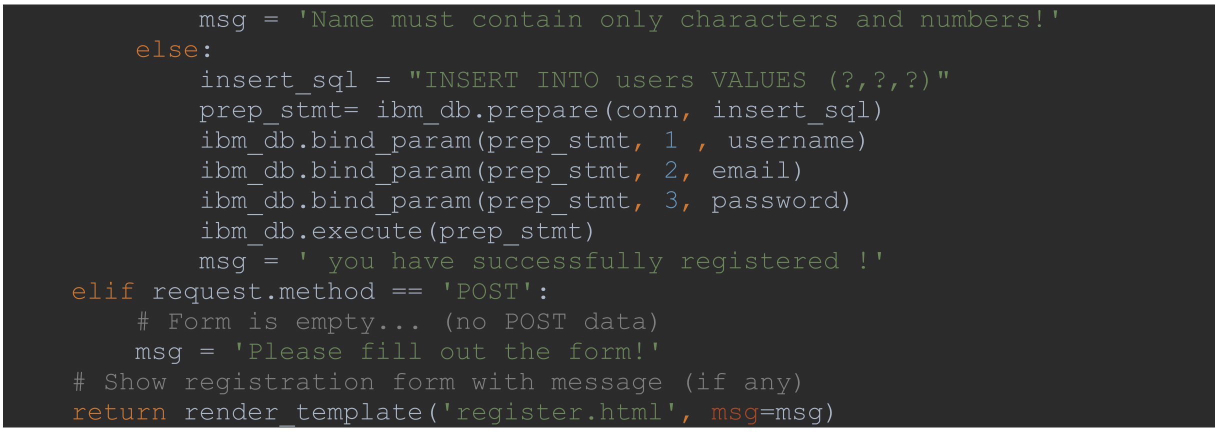
ROUTING TO THE HTML PAGE

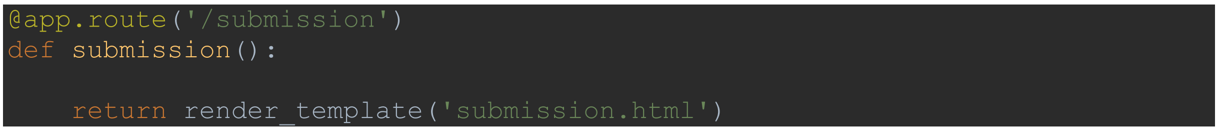
```
@app.route('/')
def home():
    return render_template('home.html')
```

```
@app.route('/pythonlogin/', methods=['GET', 'POST'])
def login():
    global userid
    msg=''

    if request.method =='POST':
        username = request.form['username']
        password =request.form['password']
        sql ="SELECT * FROM users WHERE username =? AND password=?"
        stmt = ibm_db.prepare(conn, sql)
        ibm_db.bind_param(stmt,1,username)
        ibm_db.bind_param(stmt,2,password)
        ibm_db.execute(stmt)
        account = ibm_db.fetch_assoc(stmt)
        print (account)
        if account:
            session['loggedin']=True
            session['id'] = account ['USERNAME']
            userid = account['USERNAME']
            session['username'] = account['USERNAME']
            msg = 'logged in successfully !'

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

        else:
            msg ='Incorrect username / password !'
    return render_template('login.html',msg=msg)
```

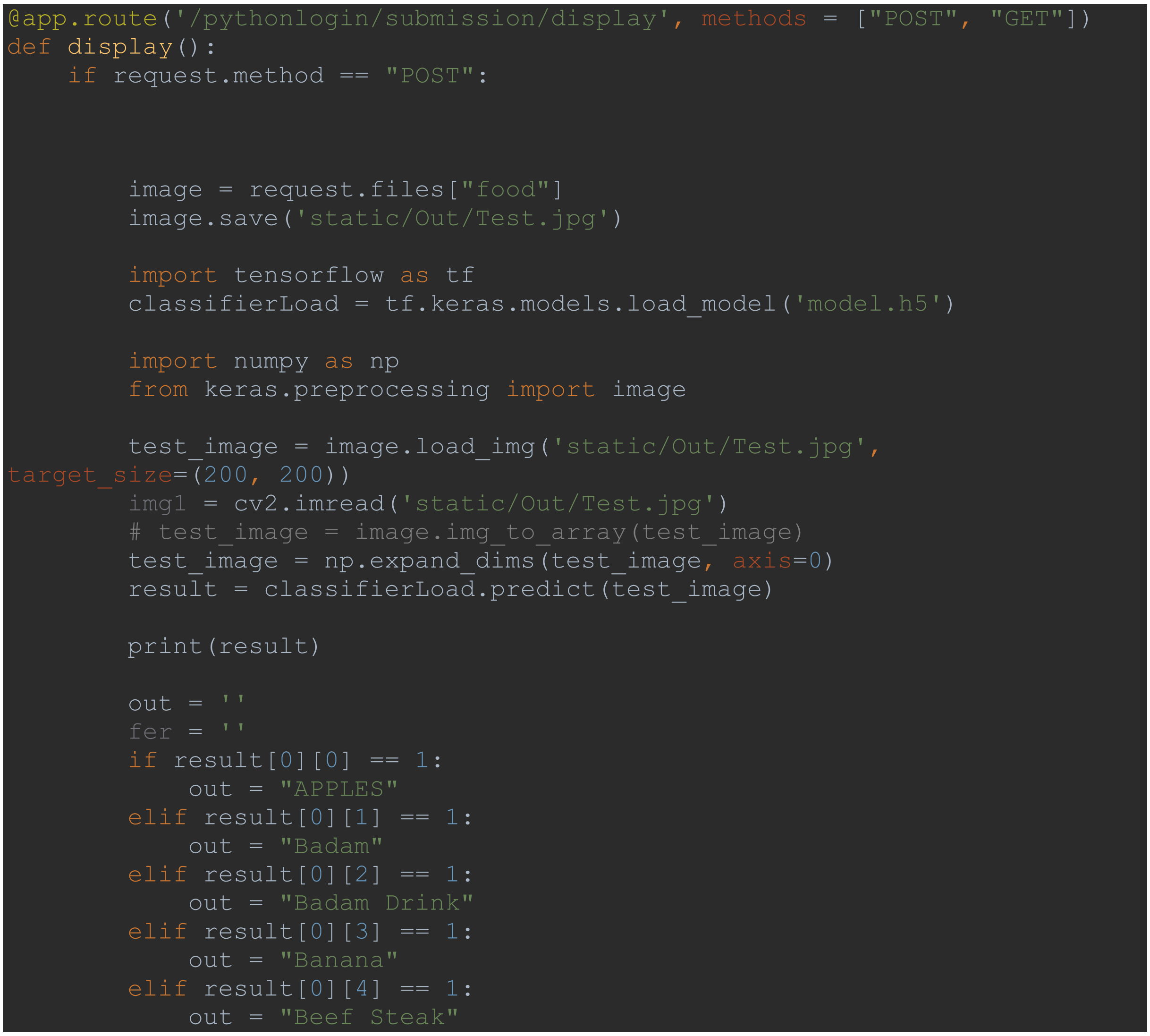
```
@app.route('/pythonlogin/register', methods=['GET', 'POST'])
def register():
    msg = ''
    if request.method == 'POST':
        username = request.form['username']
        email = request.form['email']
        password = request.form['password']
        sql = "SELECT * FROM users WHERE username = ?"
        stmt = ibm_db.prepare(conn,sql)
        ibm_db.bind_param(stmt,1,username)
        ibm_db.execute(stmt)
        account = ibm_db.fetch_assoc(stmt)
        print(account)
        if account:
            msg ='Account already exists !'
        elif not re.match(r'[^@]+@[^@]+\.[^@]+',email):
            msg ='Invaild email address !'
        elif not re.match(r'[A-Za-z0-9]+',username):
```



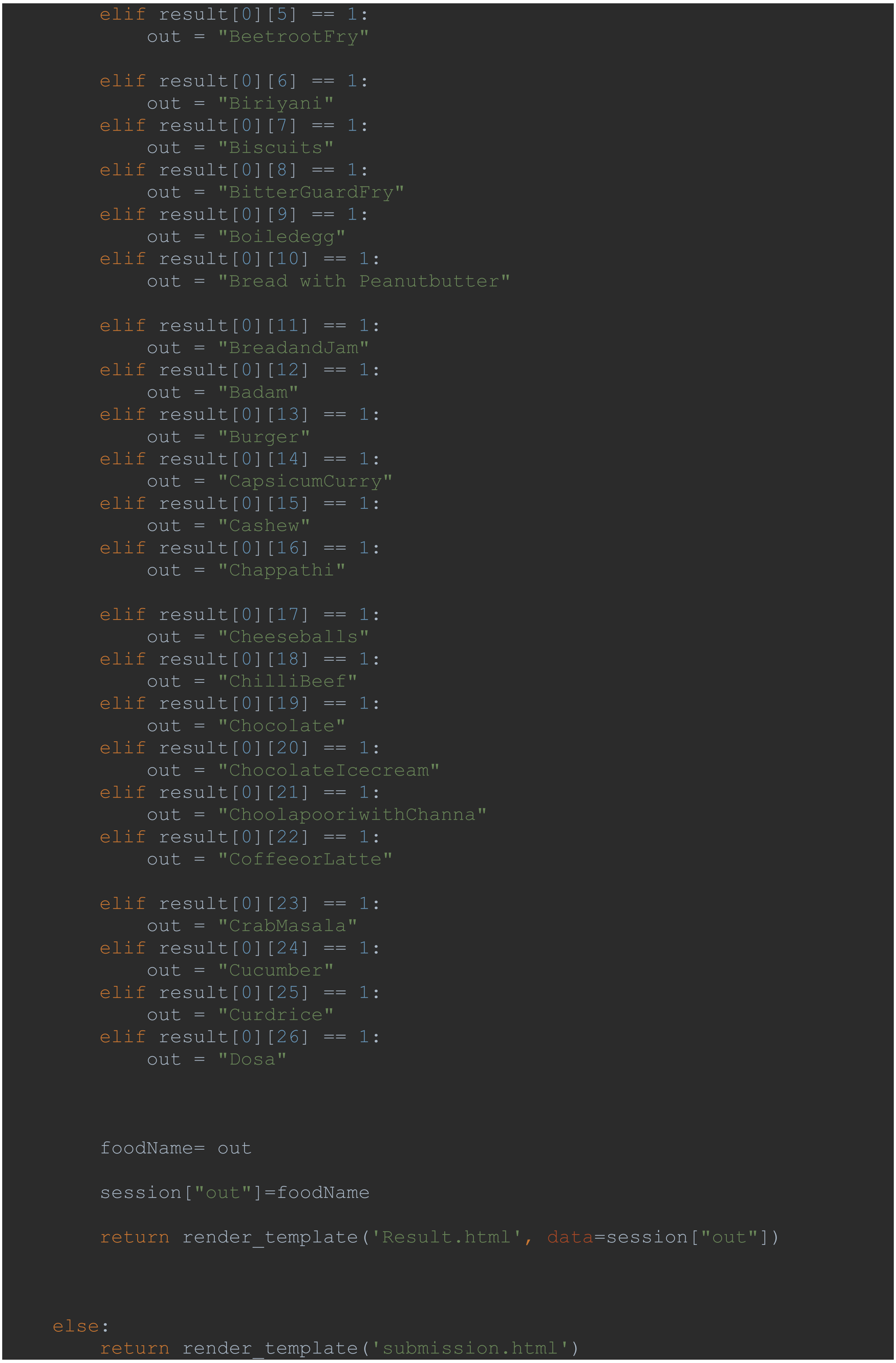
```
            msg = 'Name must contain only characters and numbers!'
        else:
            insert_sql = "INSERT INTO users VALUES (?,?,?)"
            prep_stmt= ibm_db.prepare(conn, insert_sql)
            ibm_db.bind_param(prep_stmt, 1 , username)
            ibm_db.bind_param(prep_stmt, 2, email)
            ibm_db.bind_param(prep_stmt, 3, password)
            ibm_db.execute(prep_stmt)
            msg = ' you have successfully registered !'
    elif request.method == 'POST':
        # Form is empty... (no POST data)
        msg = 'Please fill out the form!'
    # Show registration form with message (if any)
    return render_template('register.html', msg=msg)
```



```
@app.route('/submission')
def submission():

    return render_template('submission.html')
```



```
@app.route('/pythonlogin/submission/display', methods = ["POST", "GET"])
def display():
    if request.method == "POST":



        image = request.files["food"]
        image.save('static/Out/Test.jpg')

        import tensorflow as tf
        classifierLoad = tf.keras.models.load_model('model.h5')

        import numpy as np
        from keras.preprocessing import image

        test_image = image.load_img('static/Out/Test.jpg',
target_size=(200, 200))
        img1 = cv2.imread('static/Out/Test.jpg')
        # test_image = image.img_to_array(test_image)
        test_image = np.expand_dims(test_image, axis=0)
        result = classifierLoad.predict(test_image)

        print(result)

        out = ''
        fer = ''
        if result[0][0] == 1:
            out = "APPLES"
        elif result[0][1] == 1:
            out = "Badam"
        elif result[0][2] == 1:
            out = "Badam Drink"
        elif result[0][3] == 1:
            out = "Banana"
        elif result[0][4] == 1:
            out = "Beef Steak"
```



```
        elif result[0][5] == 1:
            out = "BeetrootFry"

        elif result[0][6] == 1:
            out = "Biriyani"
        elif result[0][7] == 1:
            out = "Biscuits"
        elif result[0][8] == 1:
            out = "BitterGuardFry"
        elif result[0][9] == 1:
            out = "Boiledegg"
        elif result[0][10] == 1:
            out = "Bread with Peanutbutter"

        elif result[0][11] == 1:
            out = "BreadandJam"
        elif result[0][12] == 1:
            out = "Badam"
        elif result[0][13] == 1:
            out = "Burger"
        elif result[0][14] == 1:
            out = "CapsicumCurry"
        elif result[0][15] == 1:
            out = "Cashew"
        elif result[0][16] == 1:
            out = "Chappathi"

        elif result[0][17] == 1:
            out = "Cheeseballs"
        elif result[0][18] == 1:
            out = "ChilliBeef"
        elif result[0][19] == 1:
            out = "Chocolate"
        elif result[0][20] == 1:
            out = "ChocolateIcecream"
        elif result[0][21] == 1:
            out = "CholapooriwithChanna"
        elif result[0][22] == 1:
            out = "CoffeeorLatte"

        elif result[0][23] == 1:
            out = "CrabMasala"
        elif result[0][24] == 1:
            out = "Cucumber"
        elif result[0][25] == 1:
            out = "Curdrice"
        elif result[0][26] == 1:
            out = "Dosa"



        foodName= out

        session["out"]=foodName

        return render_template('Result.html', data=session["out"])



    else:
        return render_template('submission.html')
```

```
@app.route("/pythonlogin/submission/out", methods=['GET', 'POST'])
def out():
    if request.method == "POST":
        nutrients = {}
        USDAapiKey = '9f8yGs19GGo5ExPpBj7fqjKOFlXXxkJdMyJKXwG3'

        foodName = session["out"]
        response = requests.get(

'https://api.nal.usda.gov/fdc/v1/foods/search?api_key={}&query={}&requireAl
lWords={}'.format(USDAapiKey,

foodName,

True))

        data = json.loads(response.text)
        concepts = data['foods'][0]['foodNutrients']
        arr = ["Sugars", "Energy", "Vitamin A", "Vitamin D", "Vitamin B",
"Vitamin C", "Protein", "Fiber", "Iron",
               "Magnesium",
               "Phosphorus", "Cholestrol", "Carbohydrate", "Total lipid
(fat)", "Sodium", "Calcium", ]
        for x in concepts:
            if x['nutrientName'].split(',')[0] in arr:
                if (x['nutrientName'].split(',')[0] == "Total lipid
(fat)"):
                    nutrients['Fat'] = str(x['value']) + " " +
x['unitName']
                else:
                    nutrients[x['nutrientName'].split(',')[0]] =
str(x['value']) + " " + x['unitName']

        return render_template('display.html', x=foodName, data=nutrients,
account=session['username'])
```

Finally, Run the application

```
if __name__=='__main__':
    app.run(host='0.0.0.0',debug = True, port = 30376)
```