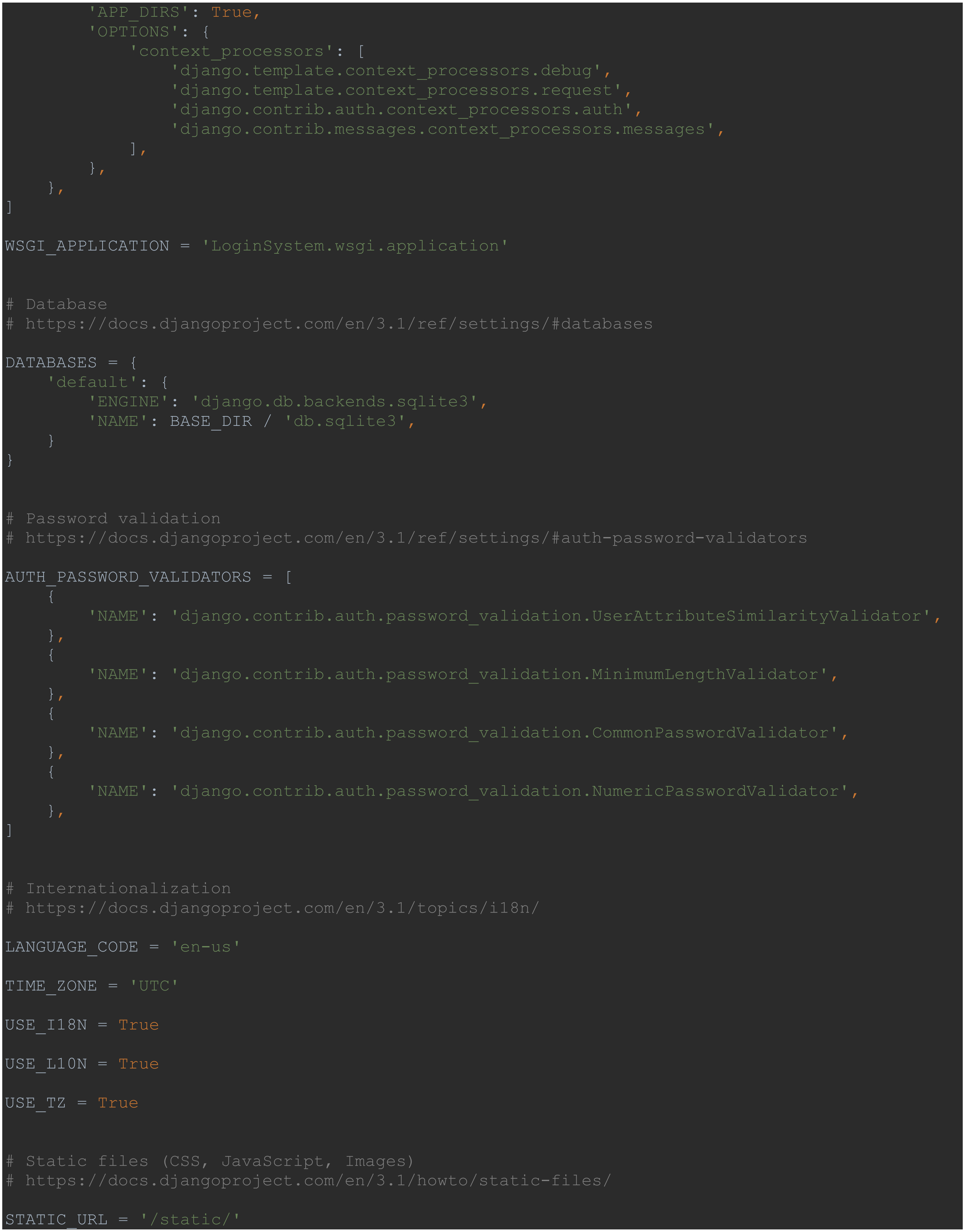
EXPERIMENT 8

CODE: settings.py:-

```
"""
Django settings for LoginSystem project.

Generated by 'django-admin startproject' using Django 3.1.7.

For more information on this file, see
https://docs.djangoproject.com/en/3.1/topics/settings/

For the full list of settings and their values, see
https://docs.djangoproject.com/en/3.1/ref/settings/
"""

from pathlib import Path
import os

# Build paths inside the project like this: BASE_DIR / 'subdir'.
BASE_DIR = Path(__file__).resolve().parent.parent
TEMP_DIR=os.path.join(BASE_DIR,'templates')


# Quick-start development settings - unsuitable for production
# See https://docs.djangoproject.com/en/3.1/howto/deployment/checklist/

# SECURITY WARNING: keep the secret key used in production secret!
SECRET_KEY = 'j6gx-b24^*(+fbbsmivi8e_q)si_@ce7@*4r2mko(i@rs7c=!r'

# SECURITY WARNING: don't run with debug turned on in production!
DEBUG = True

ALLOWED_HOSTS = []


# Application definition

INSTALLED_APPS = [
    'django.contrib.admin',
    'django.contrib.auth',
    'django.contrib.contenttypes',
    'django.contrib.sessions',
    'django.contrib.messages',
    'django.contrib.staticfiles',
    'myapp',
]

MIDDLEWARE = [
    'django.middleware.security.SecurityMiddleware',
    'django.contrib.sessions.middleware.SessionMiddleware',
    'django.middleware.common.CommonMiddleware',
    'django.middleware.csrf.CsrfViewMiddleware',
    'django.contrib.auth.middleware.AuthenticationMiddleware',
    'django.contrib.messages.middleware.MessageMiddleware',
    'django.middleware.clickjacking.XFrameOptionsMiddleware',
]

ROOT_URLCONF = 'LoginSystem.urls'

TEMPLATES = [
    {
        'BACKEND': 'django.template.backends.django.DjangoTemplates',
        'DIRS': [TEMP_DIR],
```



```
        'APP_DIRS': True,
        'OPTIONS': {
            'context_processors': [
                'django.template.context_processors.debug',
                'django.template.context_processors.request',
                'django.contrib.auth.context_processors.auth',
                'django.contrib.messages.context_processors.messages',
            ],
        },
    },
]

WSGI_APPLICATION = 'LoginSystem.wsgi.application'


# Database
# https://docs.djangoproject.com/en/3.1/ref/settings/#databases

DATABASES = {
    'default': {
        'ENGINE': 'django.db.backends.sqlite3',
        'NAME': BASE_DIR / 'db.sqlite3',
    }
}


# Password validation
# https://docs.djangoproject.com/en/3.1/ref/settings/#auth-password-validators

AUTH_PASSWORD_VALIDATORS = [
    {
        'NAME': 'django.contrib.auth.password_validation.UserAttributeSimilarityValidator',
    },
    {
        'NAME': 'django.contrib.auth.password_validation.MinimumLengthValidator',
    },
    {
        'NAME': 'django.contrib.auth.password_validation.CommonPasswordValidator',
    },
    {
        'NAME': 'django.contrib.auth.password_validation.NumericPasswordValidator',
    },
]


# Internationalization
# https://docs.djangoproject.com/en/3.1/topics/i18n/

LANGUAGE_CODE = 'en-us'

TIME_ZONE = 'UTC'

USE_I18N = True

USE_L10N = True

USE_TZ = True


# Static files (CSS, JavaScript, Images)
# https://docs.djangoproject.com/en/3.1/howto/static-files/

STATIC_URL = '/static/'
```

LoginSystem\urls.py:

```
"""LoginSystem URL Configuration

The `urlpatterns` list routes URLs to views. For more information please see:
    https://docs.djangoproject.com/en/3.1/topics/http/urls/
Examples:
Function views
    1. Add an import:  from my_app import views
    2. Add a URL to urlpatterns:  path('', views.home, name='home')
Class-based views
    1. Add an import:  from other_app.views import Home
    2. Add a URL to urlpatterns:  path('', Home.as_view(), name='home')
Including another URLconf
    1. Import the include() function: from django.urls import include, path
    2. Add a URL to urlpatterns:  path('blog/', include('blog.urls'))
"""
from django.contrib import admin
from django.urls import path, include

urlpatterns = [
    path('admin/', admin.site.urls),
    path('',include('myapp.urls'))
]
```

Myapp\urls.py:

```
from django.urls import path
from myapp import views

urlpatterns =[
    path('',views.index,name='index'),
    path('register/',views.register,name='register'),
    path('login/',views.login,name='login'),

]
```

Myapp\views.py:

```
from django.shortcuts import  render, redirect
from django.contrib.auth.models import User
from django.contrib import messages
from django.contrib.auth import authenticate, login as auth_login

def index(request):
    return render(request,'myapp/index.html')

def register(request):
    if request.method == "POST":
        username =request.POST.get('username')
        password=request.POST.get('password')
        email = request.POST.get('email')
        if User.objects.filter(username=username).exists():
            messages.info(request, "INVALID USERNAME!!!”)
        else:
            if User.objects.filter(email=email).exists():
                messages.info(request, "INVALID ID!!!")
            else:
                data = User.objects.create_user(username=username, password=password,
email=email)
                data.save()
                messages.success(request,"SUCESSFULLY REGISTERED!!!")
                user = authenticate(username=username,password=password)
                auth_login(request,user)
                return redirect('/')
    return render(request,'myapp/register.html',{'messages':messages})

def login(request):
    if request.method =="POST":
        username = request.POST.get('username')
        password = request.POST.get('password')
        user = authenticate(username=username,password=password)
        auth_login(request,user)

        messages.success(request,'SuccessfullY LOGGED IN!!')

        return redirect('/')
    return render(request,'myapp/login.html')
```

LoginSystem\templates\index.html:

```
<!DOCTYPE html>
<html lang="en">
<head>
     <meta charset="UTF-8">
     <title> User Authentication </title>
</head>
<body>
<h1> Welcome to index page </h1>
<a href="{% url 'register' %}">Register</a>
<a href="{% url 'login' %}">Login</a>
</body>
</html>
```

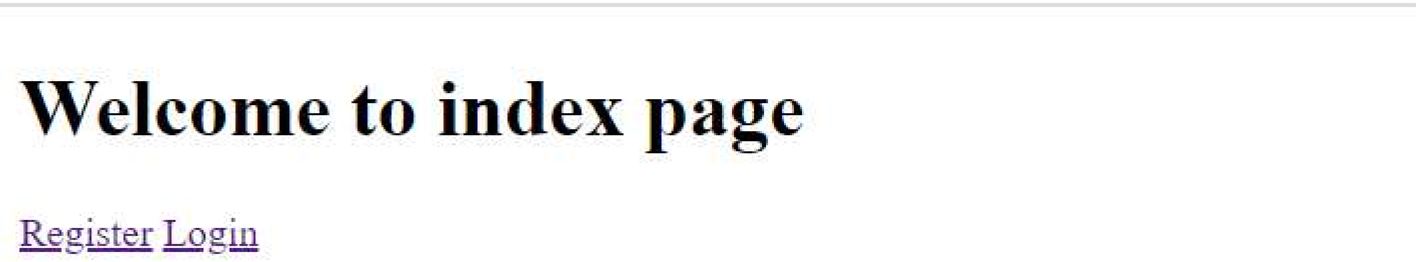
LoginSystem\templates\login.html:

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <title>Login Page</title>
    {% load static %}
    <link rel="stylesheet" TYPE="text/css" href="{% static 'index.css' %}">
</head>
<body>

<form method="post">{% csrf_token %}
    <label><h2>LOGIN</h2></label><br>
    <input class ="inputb" type="text" placeholder="Username "  name="username"
required><br><br>
    <input class="inputb" type="password" name="password" required><br>
        <input type="submit" name="Submit">
</form>

</body>
</html>
```

LoginSystem\templates\register.html:

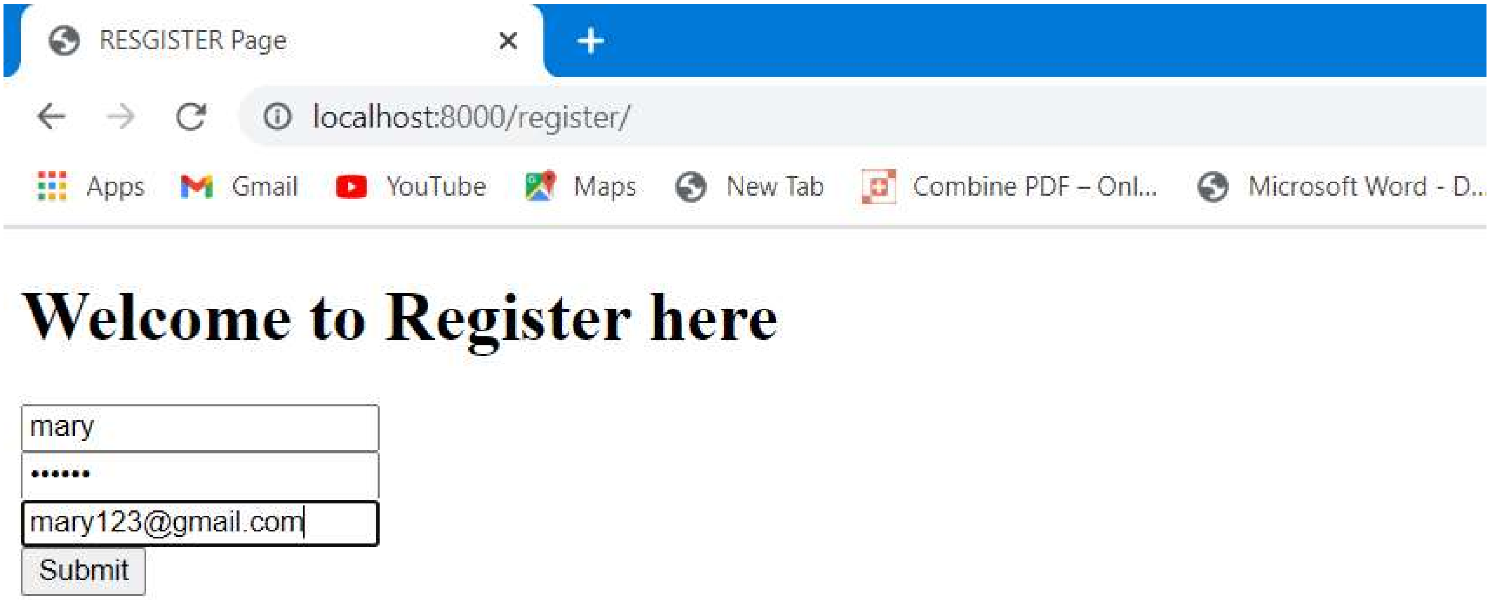
```
<!DOCTYPE html>
<html lang="en">
<head>
     <meta charset="UTF-8">
     <title> RESGISTER Page </title>
</head>
<body>
<h1> Welcome to Register here </h1>
<form method ="post">
    {% csrf_token %}
     <input type="text" name="username" id="usename" placeholder="Username"><br>
     <input type="password" name="password" id="password" placeholder="Password"><br>
     <input type="email" name="email" id="email" placeholder="Email"><br>
     <input type="submit" name="submit">
</form>
</body>
</html>
```

OUTPUTS:



Welcome to index page

Register Login



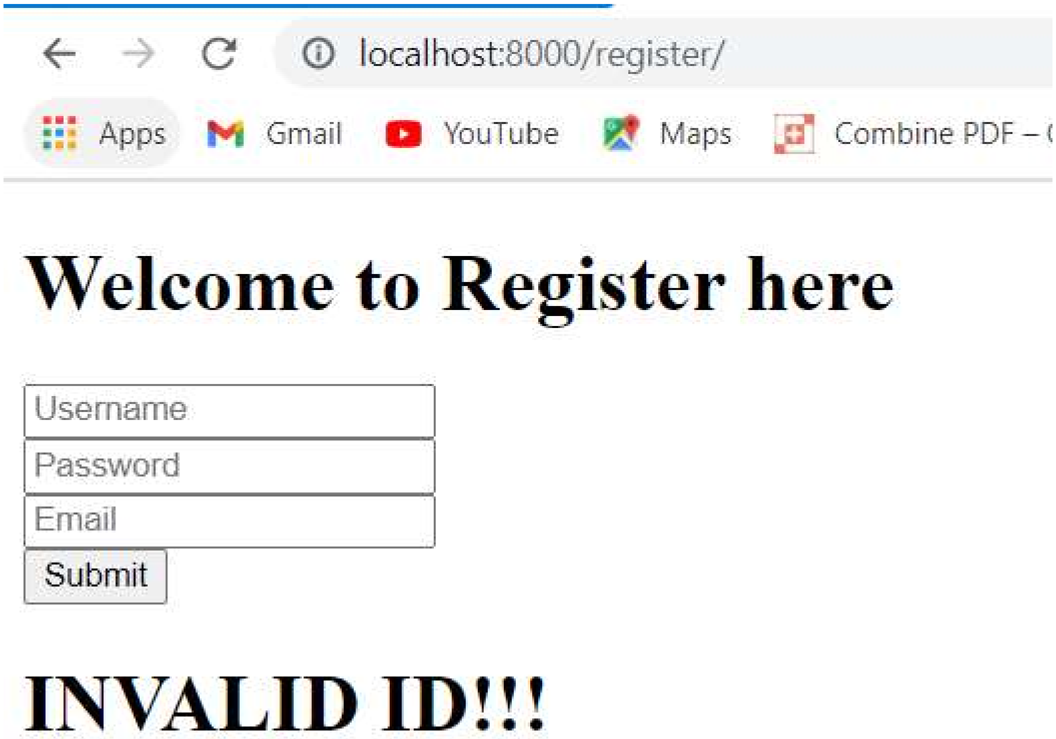
Welcome to Register here

mary

••••••

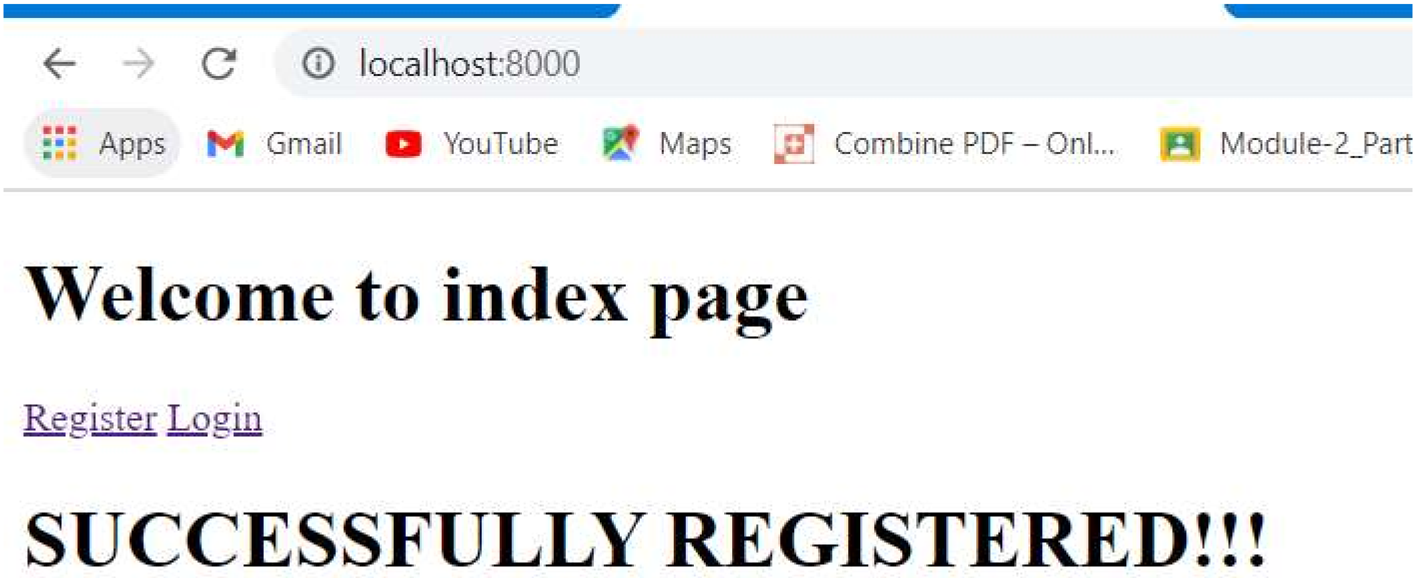
mary123@gmail.com

Submit



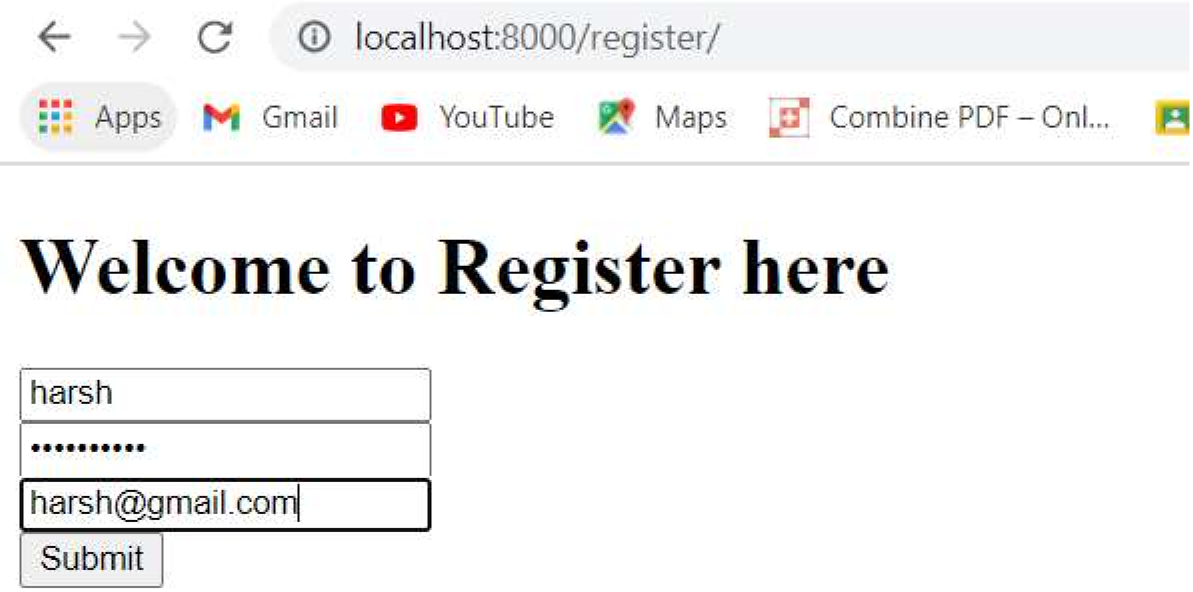
Welcome to Register here

INVALID ID!!!



Welcome to index page

SUCCESSFULLY REGISTERED!!!



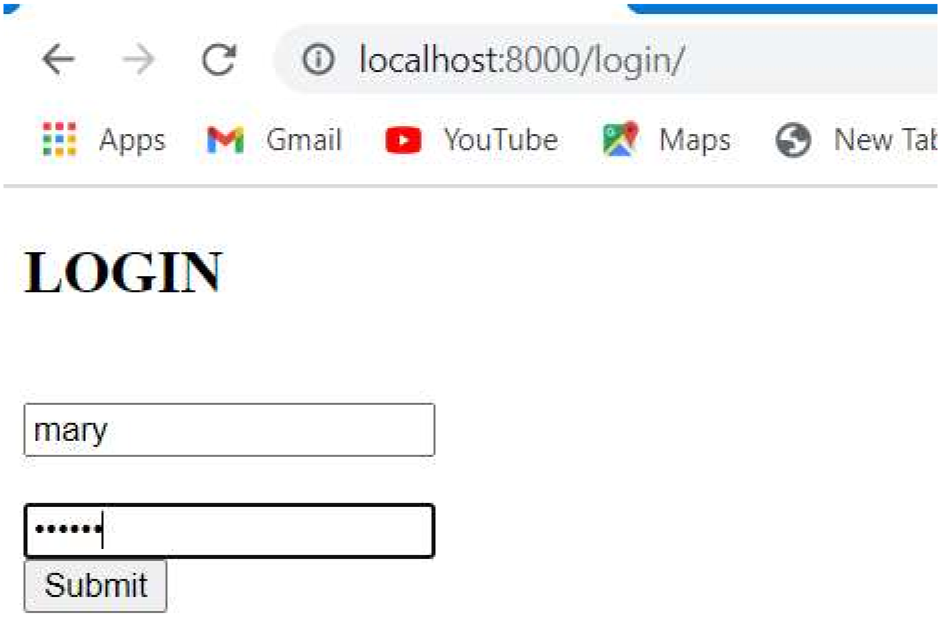
localhost:8000/register/

Welcome to Register here

harsh

••••••••••

harsh@gmail.com

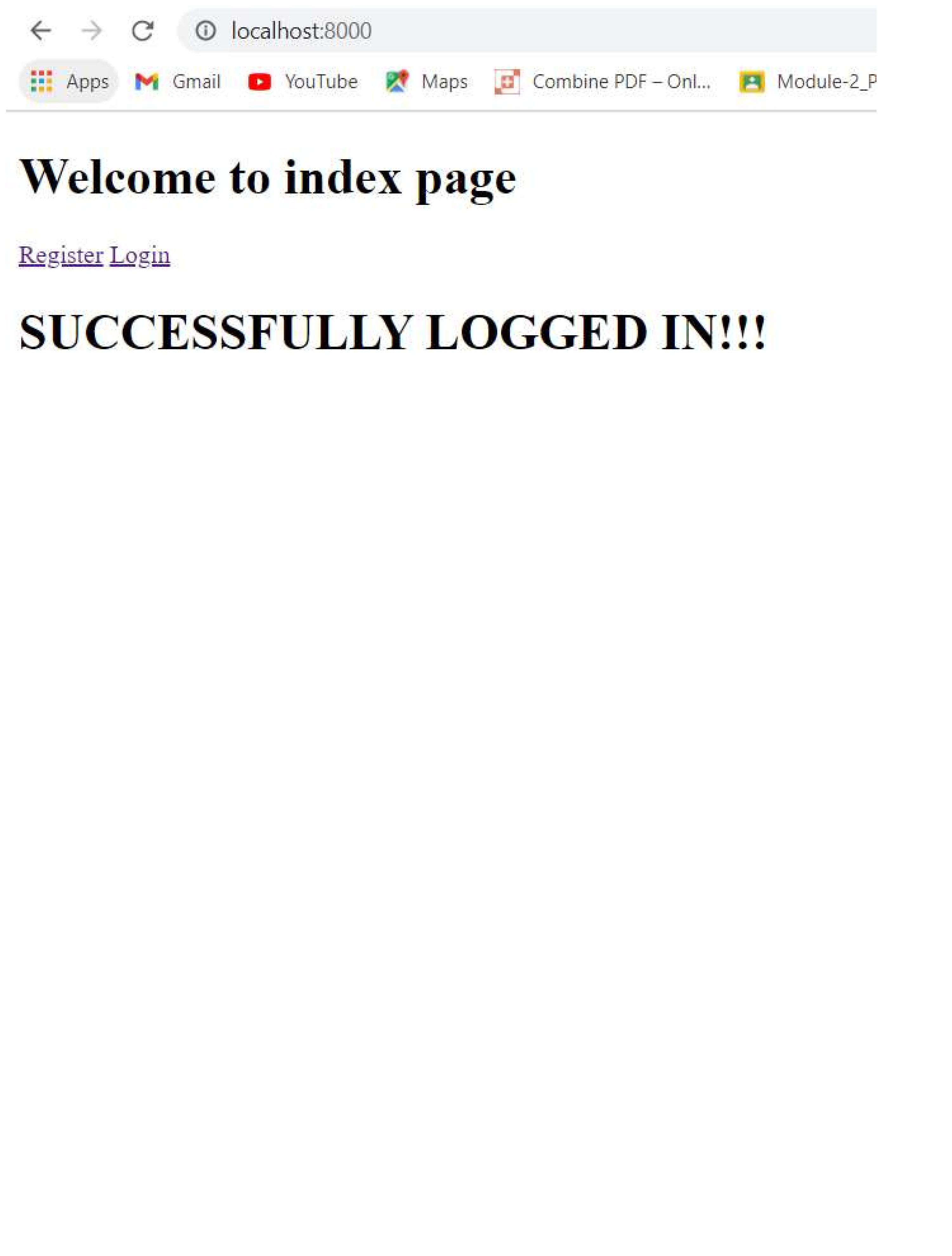


localhost:8000/login/

LOGIN

mary

••••••



Welcome to index page

Register Login

SUCCESSFULLY LOGGED IN!!!