**Task No 1**

a. **How you executed the task**

It is a pycharm project so the steps which I have done for running the task is:

TASK 1 GOAL 1

1. Import the libraries (one by one as required)
2. Create html pages with ninja technique (best for taking decision in the html pages as well as save us from duplicating the code)
3. Create the **./uploads/** folder
4. Create form to upload the files (File Upload API)
   1. Note: There is a specific format in file to upload which I have also explained in the App
      1. File should be in .txt format
      2. Two consecutive names are only separated by a comma(,) character. Note No space before and after the comma
      3. First name and last name must be separated by space

TASK 1 GOAL 2 , 3

1. Three steps are completed in this goal
   1. Open the ./uploads/ directory and filter the name from all of the files by processing one by one. In coding see function (Route funciton filter())
   2. Preprocess the each file exist in directory ./uploads/ In coding see function (preprocess\_the\_name\_file(filename) )
   3. Filter names from file (parameter filename) and return as a list and also return total no of filter names. In coding see function (filter\_names(filename,last\_name) )
2. Function documentation
   1. preprocess\_the\_name\_file(filename) Documentation:
      1. It is a funciton which preprocess the file before filtering the person having last name = Siddique.
         1. open a file and remove , character from the file because we consider a file where names are seperated by ,
         2. CAPATALIZE all the character of the file file so that searching should be easy  
            :param filename: filename is required on which you want to apply the preprocess method  
            :return: None
   2. filter\_names(filename,last\_name) Documentation:
      1. This function filter out the person in file = filename having last name = last\_name  
         :param filename: filename is required from which we filter out the person having last name  
         :param last\_name: Last name on which you want to filter out the users  
         :return: return a list of filterd persons who have last name = parameteric lastname  
         :return: it also return the count of people having last name = parametric lastname

TASK 1 GOAL 4

Steps taken place in this goal

First of all we have to create a database

1. Set the database name by ( app.config[**'SQLALCHEMY\_DATABASE\_URI'**] = **'sqlite:///filter\_name.db'**) filter\_name.db is the name of our db
2. Create a db object
3. Create table in the coding ( class add\_name(db.Model))
4. Open the terminal and export / create database
   1. Open terminal of the pycharm
   2. Run command >python
   3. Run command for importing the db object to the terminal for creating it database>>from app import db
   4. Run command to create database >>db.create\_all()
   5. Run command to exit the terminal>>exit()

Next steps are entering data in the database

1. Opens the directory (./uploads/) and pick a filename one by one
2. Preprocess the selected file
3. Filter the required name by using the function dicussed in TASK 1 GOAL 2,3
4. Now pass these Filtered names and Filename to the function (enter\_name\_in\_database(filtered\_names,filename))
5. enter\_name\_in\_database(filtered\_names,filename)Documentation:
   1. The function take the names and the filename to enter in the database  
      :param filtered\_names: It takes a list of names to enter in the database  
      :param filename: It also take the filename as parameter to enter in the database  
      :return: True for correct entry in the database and false for vise versa  
        
      :Note: No duplicate names can enter in the database

TASK 1 GOAL 5

Separate project so see other file for its documentation

**b. What libraries/resources you have used for development**

We use the following libraries to build this task

1. form flask import Flask for Flask app, render\_template for rendering/redirect to html pages and request for dealing with the data submitted through the forms

from flask import Flask, render\_template, request

1. For dealing with the directories of the system we include

import os

1. For dealing with the databases task we include

from flask\_sqlalchemy import SQLAlchemy

**c. Any issues that you met during the process**

Issues which I face in this task

1. Preprocessing the files is the hinderance for me that’s why only deal with the specific format.
2. Store duplicate names I have solved it but It enter name once in the database either it is in same file or different files of ./update/ folder

**d. Any additional development that you did out of the requirements.**

Additional development are:.

1. Preprocessing the file
2. Filter name for multiple files (in a single folder)
3. No duplicates are allowed in the database