Talking through a reflection of the project, there first thing I did was to create a package for all the classes after writing down a pseudocode for how I was going to approach the project question. There were three csv datafiles named airport, routes and airlines where we had to define classes, fields, constructors and java methods as well as error handling. Using the appropriate types including collections and justifiable data structures, I was able to write a main method including a console I/O.

In the code, I created a readfile class where I used a try, catch and finally statement to catch a FileNotFoundException and an IOException error.

I also created a mains class where I created and initialized an array list and an airport object with the readfile object of the airport.csv file. I used some java packages and API to help with the try catch function and also to use some library class like Array list.

I created an object class which acts as an inheritance class it inherits the functions and methods used in the classes created for the three data file classes. The class also has the user defined object types that has constructors. That is the airport, airline and routes classes.

In my code, I created mutators and accessors for each of the data file classes and realized that most of the methods and the functions are what we studied in class like the equals method, add method among others and print stack trace for error handling.

Finally, using the uniform cost search algorithm, I was able to get the required output after a user enters an input of a city and country for both start and finish destination. The output produced consisted of an airline code, an airport code ant the number of stops made. It also consisted of the total number of flights needed to get to a destination as well as the number of stops that have to be made.