

## Question 1

Not yet answered

Marked out of 25.00

v1 (latest)

### Part 1: Python

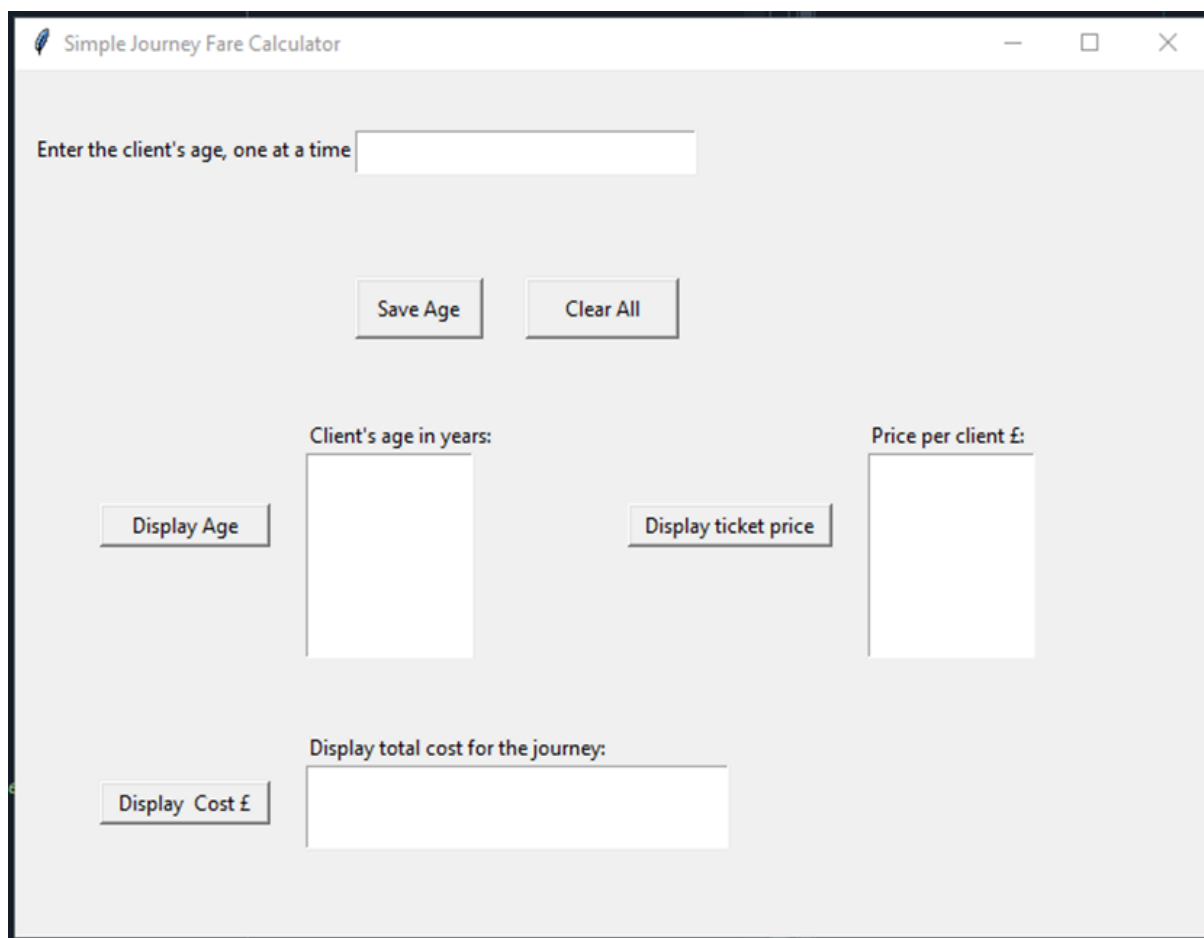
**Problem:** A bus company determines the ticket price based on the passenger's age. Passengers 2 years of age and less should travel for free (£0). Children between 3 and 12 years of age cost £7 each. The ticket price for seniors aged 66 and over costs £13 each. The ticket price for any other passengers should cost £18 each.

You are required to create a program that begins by reading the ages of all the passengers in a group, one age entered at a time.

You should write the code for each task below in the same **python source file**, as indicated below. You should then submit **your source file** through Moodle as described at the end. Your file should be named **your\_name\_python\_task.py** (replace "your\_name" with your actual name).

#### Python Task 1a: tkinter GUI

Create a program that should display the following screen **[4 marks]**:



#### Python Task 1b: Database and computing the bus price for a group travelling to the city

The programme should save each passenger's age and each ticket price in a database when the "Save" button is clicked, and the window should be automatically cleared to allow the next passenger's age to be entered. **[6 marks]**. The database should be called **TravelPrice**. **[1 mark]**.

If a user clicks the button "Display age", the system should display all the passengers' age saved in the database. **[3 marks]**

If a user clicks the button "Display ticket price", the system should display the ticket price per passenger's age saved in the database.

Note: Each ticket price must correspond to the passenger's age **[3 marks]**

If a user clicks the "Display cost" button, the system should display the total cost for the journey for that group of passengers. **[5 marks]**

It should clear all three Display windows and delete everything from the database when the "Clear All" button is clicked (*if the program is restarted and the Display buttons are clicked, nothing should appear*) **[2 marks]**

Simple Journey Fare Calculator

Enter the client's age, one at a time

Save Age

Clear All

Client's age in years:

2  
78  
68  
45  
2

Display Age

Price per client £:

0  
13  
13  
18  
0

Display ticket price

Display total cost for the journey:

44

Display Cost £

## Python submission

Ensure your submission file is named exactly as it is supposed to (i.e. **your\_name\_python\_task.py**). Submit the final version of the file including all of the above tasks.

Maximum file size: 100 MB, maximum number of files: 1

Files

You can drag and drop files here to add them.