

Note: Please **SUBMIT** each question individually before ending the exam to receive score.
Note: This is a monitored test.

Poet of an Era

Download database file from here: http://110.39.173.36/poets_archive.db

For centuries, poetry has been the heartbeat of South Asian culture, a force that has shaped revolutions, stirred emotions, and given voice to the deepest human experiences. From the grandeur of Mughal courts to the smoky tea houses of Karachi and Lahore, poets have played an unspoken role in defining the identity of their time. Some were celebrated in their lifetimes, their words echoing through grand Mushairas attended by nobles and scholars. Others, unrecognized in their own era, found fame long after their voices had faded, as later generations discovered their verses and carried them forward.

Yet, as modern literary scholars revisit the past, they face an unsettling question, who were the true architects of poetic thought in each era? Those who were widely recognized in their own time or those who influenced the future generation.

The Pakistan Literary Society (PLS), a group of historians and literary scholars, has launched a grand initiative to answer this question. To accomplish this, PLS has compiled an extensive dataset covering centuries of poetic tradition. This dataset includes poets and their active eras, influence chains between poets showing who inspired whom, poetry works, and Mushaira records detailing when and where a poet's work was recited even years after their passing.

However, the challenge remains for PLS: how do we measure influence when it extends across generations, weaving an invisible thread through time? They decided to define a poet's influence by the weighted sum of legacy score and longevity. Legacy score will be weighted 90% and longevity will be weighted at 10%.

A poet's legacy score is the sum of influence scores from all poets they inspired. The influence score is determined by the number of years between the poet's writing start year and that of the poets they influenced. If an influenced poet further inspires others, the original poet's score increases, but with a 50% reduction per level in the influence chain. For example, poet A started writing in 1900 and influenced B (who started in 1940), A earns 40 points. If B influences C (who starts in 1980), B gets 40 points, and A gets 20 points (half of B's score). If C influences D (in 2020), C gets 40 points, B gets 20, and A gets 10.

Longevity is measured by the number of years between their start year and year when any of their work was recited last time in a mushaira.

Your task is to build a system which gives the most influenced poet of the given era according to the data in the given database.

Here is the schema of the database with some sample data.

Poet

id	name	started_writing_year	death_year
<INT>	<VARCHAR>	<INT>	<INT>
1	Mir Taqi Mir	1740	1810
2	Mirza Ghalib	1820	1869
3	Allama Iqbal	1900	1938
4	Faiz Ahmed Faiz	1950	1984
5	Ahmed Faraz	1970	2008

PoeticInfluence

id <INT>	poet_id <FK to Poet>	influenced_poet_id <FK to Poet>
1	1	2
2	2	4
3	2	5
4	3	4
5	3	5
6	4	5

PoetryWork

id <INT>	poet_id <FK to Poet>	title <VARCHAR>	type <VARCHAR>	year_published <INT>
1	1	Dewaan-e-Mir	Ghazal	1750
2	2	Dewaan-e-Ghalib	Ghazal	1840
3	3	Bang-e-Dra	Poem	1924

4	3	Payam-e-Mashriq	Poem	1923
5	4	Dasht-e-Tanhaee	Poem	1962
6	5	Ranjish Hi Sahi	Ghazal	1974

MushairaRecitation

id <INT>	poetry_work_id <FK to PoetryWork>	year <INT>
1	1	1850
2	2	1950
3	3	1980
4	1	1999
5	4	2020
6	5	2020
7	6	2000

Constraints

1. Only the poets with `started_writing_year >= era_start_year` and `started_writing_year <= era_end_year` would be considered for potential poet of that era
2. One poet could be influenced by many poets and one can influence many
3. No two poets could be influenced from each other, e.g., if A influenced B then B can never influence A
4. Each poet would have at least one poetry work

Input Format	Output Format
era_start_year and era_end_year separated by space	Name of the most influential poet as per the data in the given era

NOTE: A stub code is provided below to download the sqlite database file that contains all the data in above provided format. Connect to sqlite using this file and complete the tasks. The stub code will be visible when you select a language.

▼ Your Response IN PROGRESS

After you submit your response, you cannot edit it.

Write Your Code Here

Javascript (Node.js) ▼

```
1 const fs = require('fs');
2 const sqlite3 = require('/usr/local/lib/node_modules/sqlite3');
3 const http = require("http");
4
5
6 function downloadFile(url, outputFile) {
7   return new Promise((resolve, reject) => {
8     const file = fs.createWriteStream(outputFile);
9
10    http
11    .get(url, (response) => {
12      if (response.statusCode >= 300 && response.statusCode
13        return downloadFile(response.headers.location, out
```

```
14         } else if (response.statusCode !== 200) {
15             reject(response.statusCode);
16             return;
17         }
18
19         response.pipe(file);
20         file.on("finish", () => {
21             file.close();
22             resolve();
23         });
24     })
25     .on("error", (err) => {
26         fs.unlink(outputFile, () => {}); // Delete file on err
```

Run Code

CODE OUTPUT DOES NOT MATCH WITH THE EXPECTED OUTPUT

Submit your response

Sample Test Cases Result: 0/3

Test Input	Your Output	Expected Output
1700 1850		Mirza Ghalib

Test Input	Your Output	Expected Output
1900 1990		Allama Iqbal
1947 2025		Faiz Ahmed Faiz