

Impact factor

The impact factor is a numerical index proposed to evaluate the influence of scientific journals. It takes into account the number of articles published by a journal and the number of citations these articles receive. The "journal_IF.csv" file reports the most recent impact factor for scientific journals in the Computer Science area.

Example file "journal_IF.csv"

```
journal name,ISSN,e-ISSN,category,citations,impact factor
Journal of Computer and System Sciences,0022-0000,1090-2724,Theory & Methods,4964,1.043
Information Processing Letters,0020-0190,1872-6119,Information Systems,3878,0.851
ACM Transactions on Computation Theory,1942-3454,1942-3462,Theory & Methods,190,N/A
ACM Transactions on Parallel Computing,2329-4949,2329-4957,Theory & Methods,171,N/A
Advances in Human-Computer Interaction,1687-5893,1687-5907,Artificial Intelligence,369,N/A
ACM Computing Surveys,0360-0300,1557-7341,Theory & Methods,14992,14.324
Communications of the ACM,0001-0782,1557-7317,Hardware & Architecture,26575,14.065
Requirements Engineering,0947-3602,1432-010X,Software Engineering,829,2.275
Journal of the ACM,0004-5411,1557-735X,Software Engineering,7894,2.269
Distributed Computing,0178-2770,1432-0452,Theory & Methods,868,1.937
ACM Transactions on Computer Systems,0734-2071,1557-7333,Theory & Methods,1380,1.692
```

The first row of the file reports the names of the fields. Each journal has a title, but there may be journals (from different publishers) with the same title, so journals are uniquely identified by the ISSN code. In addition to the ISSN code (always present), if the journal is distributed in electronic format it also has an e-ISSN code (optional). For each journal, the following information is provided: category (i.e., the type of articles published by the journal), number of citations received, and impact factor. If a journal's impact factor is not available (e.g., for more recent journals) the notation "N/A" appears.

The total impact factor (total IF) is an index proposed to evaluate a researcher's scientific output. It is obtained by summing the impact factor of the journals on which the researcher's works are published.

Write a program that asks the user for a researcher's surname (e.g., "Goldwasser"). The program reads the corresponding .csv file for the researcher's surname (in the example: "Goldwasser.csv"). The program must alert the user if the file does not exist. The file contains the list of the researcher's publications (the first row reports the names of the fields), with the following information:

- list of authors (in addition to the researcher, other co-authors may have contributed to the publication). The authors are listed with their surname and initial of their first name, separated by a comma. Given the possible presence of a comma, this field is always enclosed in quotation marks.
- title of the publication
- publication year
- nome della rivista o nome della conferenza in cui appare la pubblicazione
- codice ISSN (solo per le riviste; per le conferenze questo campo è vuoto)

Example file "Goldwasser.csv"

```
Authors,Title,Year,Source title,ISSN
"Goldwasser S., Kalai Y.T., Rothblum G.N.",Delegating computation: Interactive proofs for muggles,2015,Journal of the ACM,0004-5411
"Dinur I., Goldwasser S., Lin H.",The computational benefit of correlated instances,2015,ITCS 2015 - Proceedings of the 6th Innovati
"Chandran N., Chongchitmate W., Garay J.A., Goldwasser S., Ostrovsky R., Zikas V.",The hidden graph model: Communication locality an
"Allender E., Goldwasser S.",Introduction to the special issue on innovations in theoretical computer science 2012 - Part II,2014,AC
"Boyle E., Goldwasser S., Kalai Y.T.",Leakage-resilient coin tossing,2014,Distributed Computing,0178-2770
"Goldreich O., Goldwasser S., Ron D.",On the possibilities and limitations of pseudodeterministic algorithms,2013,ITCS 2013 - Procee
"Allender E., Goldwasser S.",Introduction to the special issue on innovations in theoretical computer science 2012,2013,ACM Transact
"Akavia A., Goldwasser S., Hazay C.",Distributed public key schemes secure against continual leakage,2012,Proceedings of the Annual
"Goldwasser S.",ITCS 2012 - Innovations in Theoretical Computer Science Conference: Preface,2012,ITCS 2012 - Innovations in Theoreti
"Goldreich O., Goldwasser S.",On the limits of nonapproximability of lattice problems,2000,Journal of Computer and System Sciences,0
"Goldwasser S., Kilian J.",Primality testing using elliptic curves,1999,Journal of the ACM,0004-5411
"Goldreich O., Goldwasser S., Ron D.",Property Testing and Its Connection to Learning and Approximation,1998,Journal of the ACM,0004
"Bellare Mihir, Goldwasser S.",Verifiable partial key escrow,1997,Proceedings of the ACM Conference on Computer and Communications S
"Goldwasser S.",Multi-party computations: past and present,1997,Proceedings of the Annual ACM Symposium on Principles of Distributed
"Feige U., Goldwasser S., Lovasz L., Safra S., Szegedy M.",Interactive proofs and the hardness of approximating cliques,1996,Journal
"Goldreich O., Goldwasser S., Micali S.",How to construct random functions,1986,Journal of the ACM,0004-5411
"Goldwasser S., Micali S.",Probabilistic encryption,1984,Journal of Computer and System Sciences,0022-0000
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The program must calculate:

- the researcher's total IF (Impact Factor). Only journal publications (with ISSN code) should be considered for the count.
- the total IF and the number of publications for only the first-author publications.
- the total IF and the number of publications for only the last-author publications.

Important notes:

- The correspondence between the journals listed in the two input files must take place through the ISSN code (the name of the journal may be different in the two files).
- In the publication file, each author is indicated with Last Name and First Initial, but the user only enters the Last Name through the keyboard. The position of the last author can be identified after the last comma (if the comma is present, meaning if there are multiple authors).
- If the researcher is the only author, they are considered both first and last author.
- If a researcher has written multiple publications in a journal, the impact factor of that journal is added multiple times.

Output example

```
> Enter the researcher's name: Goldwasser
Total IF for Goldwasser: 15.37
Total IF as first author: 5.58 (3 publications)
Total IF as last author: 1.04 (1 publication)
> Enter the researcher's name: Blum
Total IF for Blum: 30.89
Total IF as first author: 12.29 (8 publications)
Total IF as last author: 10.77 (5 publications)
> Enter the researcher's name: Rivest
File not found for author Rivest.
```