

CS216: Introduction to Software Engineering Techniques (Fall, 2023)
Project Assignment 1
(100 points)

Today's Date: Monday, September 18

Due Date: Friday, September 29

Academic Honesty:

All assignments of CS216 are individual work. All work submitted as part of this course must be your own. You may not share work (whether from quizzes, lab assignments, or project assignments), nor may you use code provided to you by others, except for your instructor. You are allowed to use the source code provided by the instructor of this course only.

(You should include your name and section number as part of the comments for your project assignment!!!)

The following are some sample outputs when you run your program:

```
$ ./Project1↵
```

```
Warning: need exactly 1 command line argument.
```

```
Usage: ./Project1 inputfile_name
```

Then try to execute your program with one command line argument, and the following shows a sample output:

```
$ ./Project1 actor_movie.txt↵
```

```
Warning: cannot open file named actor_movie.txt!
```

Then try to execute your program with one command line argument again, and the following shows a sample output:

```
$ ./Project1 actor_movies.txt↵
```

```
This application stores information about Actors and their  
Movies, please choose your option (Enter Q or q to quit):
```

- 1. Actors in Movies
- 2. Actors and co-actors

```
5 is my option↵
```

```
Invalid option number!
```

```
This application stores information about Actors and their  
Movies, please choose your option (Enter Q or q to quit):
```

- 1. Actors in Movies
- 2. Actors and co-actors

```
option one↵
```

Expecting a number as the option!

This application stores information about Actors and their Movies, please choose your option (Enter Q or q to quit):

1. Actors in Movies
2. Actors and co-actors

1 is my option↵

Please input the first movie title: got Mail↵

Please input the second movie title: catch me↵

Your input matches the following two movies:

You've Got Mail (1998)

Catch Me If You Can (2002)

Both movies are in the database, please continue...

Please input your menu option (enter Q or q to quit)

A -- to print all the actors in either of the two movies.

C -- to print all the common actors in both of the movies.

O -- to print all the actors who are in only one movie, but not in both.

J is my option↵

Invalid Option!

Please input your menu option (enter Q or q to quit)

A -- to print all the actors in either of the two movies.

C -- to print all the common actors in both of the movies.

O -- to print all the actors who are in only one movie, but not in both.

a↵

All the actors in either of the two movies:

Christopher Walken

Greg Kinnear

Leonardo DiCaprio

Martin Sheen

Meg Ryan

Parker Posey

Tom Hanks

Please input your menu option (enter Q or q to quit)

A -- to print all the actors in either of the two movies.

C -- to print all the common actors in both of the movies.

O -- to print all the actors who are in only one movie, but not in both.

C is my option↵

Common actors in both movies:

Tom Hanks

Please input your menu option (enter Q or q to quit)

A -- to print all the actors in either of the two movies.

C -- to print all the common actors in both of the movies.

O -- to print all the actors who are in only one movie, but not in both.

k is that ok?↵

Invalid Option!

Please input your menu option (enter Q or q to quit)

A -- to print all the actors in either of the two movies.

C -- to print all the common actors in both of the movies.

O -- to print all the actors who are in only one movie, but not in both.

o should be fine↵

Actors only in one of two movies:

Christopher Walken

Greg Kinnear

Leonardo DiCaprio

Martin Sheen

Meg Ryan

Parker Posey

Please input your menu option (enter Q or q to quit)

A -- to print all the actors in either of the two movies.

C -- to print all the common actors in both of the movies.

O -- to print all the actors who are in only one movie, but not in both.

q↵

This application stores information about Actors and their Movies, please choose your option (Enter Q or q to quit):

1. Actors in Movies

2. Actors and co-actors

1.75 is my choice↵

Please input the first movie title: school of rock↵

Please input the second movie title: hight fidelity↵

" hight fidelity " is not a VALID movie title!

This application stores information about Actors and their Movies, please choose your option (Enter Q or q to quit):

1. Actors in Movies

2. Actors and co-actors

1↵

Please input the first movie title: schol of rock↵

Please input the second movie title: hight Fidelity↵

" schol of rock " is not a VALID movie title!

" hight Fidelity " is not a VALID movie title!

This application stores information about Actors and their Movies, please choose your option (Enter Q or q to quit):

1. Actors in Movies

2. Actors and co-actors

1↵

Please input the first movie title: school of rock↵

Please input the second movie title: high Fidelity↵

Your input matches the following two movies:

School of Rock (2003)

High Fidelity (2000)

Both movies are in the database, please continue...

Please input your menu option (enter Q or q to quit)

A -- to print all the actors in either of the two movies.

C -- to print all the common actors in both of the movies.

O -- to print all the actors who are in only one movie, but not in both.

A is my choice↵

All the actors in either of the two movies:

Iben Hjejle

Jack Black

Joan Cusack

John Cusack

Mike White

Sarah Silverman

Todd Louiso

Please input your menu option (enter Q or q to quit)

A -- to print all the actors in either of the two movies.

C -- to print all the common actors in both of the movies.

O -- to print all the actors who are in only one movie, but not in both.

O↵

Actors only in one of two movies:

Iben Hjejle

Joan Cusack

John Cusack

Mike White

Sarah Silverman

Todd Louiso

Please input your menu option (enter Q or q to quit)

A -- to print all the actors in either of the two movies.

C -- to print all the common actors in both of the movies.

O -- to print all the actors who are in only one movie, but not in both.

c↵

Common actors in both movies:

Jack Black

Please input your menu option (enter Q or q to quit)

A -- to print all the actors in either of the two movies.

C -- to print all the common actors in both of the movies.

O -- to print all the actors who are in only one movie, but not in both.

Q may let me quit?↵

This application stores information about Actors and their Movies, please choose your option (Enter Q or q to quit):

1. Actors in Movies

2. Actors and co-actors

2↵

Finding the co-actors of the actor by typing his/her name:

Yi Pike↵

The actor name you entered is not in the database.

This application stores information about Actors and their Movies, please choose your option (Enter Q or q to quit):

1. Actors in Movies

2. Actors and co-actors

2↵

Finding the co-actors of the actor by typing his/her name:

Ryan Gosling↵

The co-actors of Ryan Gosling in the movie "Believer, The (2001)" are:

Billy Zane

Summer Phoenix

Theresa Russell

The co-actors of Ryan Gosling in the movie "Murder by Numbers (2002)" are:

Ben Chaplin

Michael (II) Pitt

Sandra Bullock

This application stores information about Actors and their Movies, please choose your option (Enter Q or q to quit):

1. Actors in Movies

2. Actors and co-actors

2↵

Finding the co-actors of the actor by typing his/her name:

Audrey Hepburn↵

The co-actors of Audrey Hepburn in the movie "Breakfast at Tiffany's (1961)" are:

Buddy Ebsen

George Peppard

Patricia Neal

The co-actors of Audrey Hepburn in the movie "Charade (1963)" are:

Cary Grant

James Coburn

Walter Matthau

The co-actors of Audrey Hepburn in the movie "Children's Hour, The (1961)" are:

James Garner

Miriam Hopkins
Shirley MacLaine

The co-actors of Audrey Hepburn in the movie "Funny Face
(1957)" are:

Fred Astaire
Kay Thompson
Michel Auclair

The co-actors of Audrey Hepburn in the movie "Love in the
Afternoon (1957)" are:

Gary Cooper
Maurice Chevalier
Van Doude

The co-actors of Audrey Hepburn in the movie "My Fair Lady
(1964)" are:

Rex Harrison
Stanley Holloway
Wilfrid Hyde-White

The co-actors of Audrey Hepburn in the movie "Robin and
Marian (1976)" are:

Richard Harris
Robert Shaw
Sean Connery

The co-actors of Audrey Hepburn in the movie "Roman Holiday
(1953)" are:

Eddie Albert
Gregory Peck
Hartley Power

The co-actors of Audrey Hepburn in the movie "Sabrina
(1954)" are:

Humphrey Bogart
Walter Hampden
William Holden

The co-actors of Audrey Hepburn in the movie "They All
Laughed (1981)" are:

Ben Gazzara
John Ritter
Patti Hansen

The co-actors of Audrey Hepburn in the movie "Unforgiven,
The (1960)" are:

Audie Murphy
Burt Lancaster
John Saxon

The co-actors of Audrey Hepburn in the movie "Wait Until
Dark (1967)" are:

Alan Arkin
Efram Zimbalist Jr.
Richard Crenna

The co-actors of Audrey Hepburn in the movie "War and Peace
(1956)" are:

Henry Fonda
Mel Ferrer
Vittorio Gassman

This application stores information about Actors and their
Movies, please choose your option (Enter Q or q to quit):

1. Actors in Movies
2. Actors and co-actors

2↵

Finding the co-actors of the actor by typing his/her name:

Jack Black↵

The co-actors of Jack Black in the movie "Cable Guy, The
(1996)" are:

Jim Carrey
Leslie Mann
Matthew Broderick

The co-actors of Jack Black in the movie "High Fidelity
(2000)" are:

Iben Hjejle
John Cusack
Todd Louiso

The co-actors of Jack Black in the movie "NeverEnding Story
III, The (1994)" are:

Carole Finn
Jason James Richter
Melody Kay

The co-actors of Jack Black in the movie "Saving Silverman
(2001)" are:

Amanda Peet
Jason Biggs
Steve Zahn

The co-actors of Jack Black in the movie "School of Rock (2003)" are:

Joan Cusack

Mike White

Sarah Silverman

The co-actors of Jack Black in the movie "Shallow Hal (2001)" are:

Gwyneth Paltrow

Jason Alexander

Joe Viterelli

This application stores information about Actors and their Movies, please choose your option (Enter Q or q to quit):

1. Actors in Movies

2. Actors and co-actors

3↵

Invalid option number!

This application stores information about Actors and their Movies, please choose your option (Enter Q or q to quit):

1. Actors in Movies

2. Actors and co-actors

Q↵

Thank you for using my program, bye...

Note that the blue part is the user input and ↵ represents return/enter key.