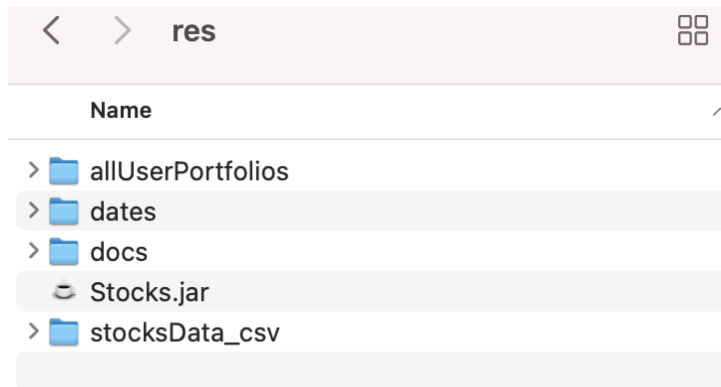


Please note that the jar file **Stocks.jar** needs to be in the same directory as the below folders

- A. **allUserPortfolios**
- B. **Dates**
- C. **stocksData_csv**



Instructions on how to run the program to create a portfolio with 3 different stocks, a second portfolio with 2 different stocks and query their value on a specific date

—

1. Open terminal on the folder which contains the jar file.
2. Type → `java -jar Stocks.jar`
3. The console will show a menu
What are you looking for today?
 1. Create a portfolio.
 2. View composition of a portfolio.
 3. Get total value of a portfolio on a specified date.
 4. Exit the program

Choose an option number:

4. Enter 1.
5. Enter the name of the Portfolio (Must be a name that does not exist already).
Enter Port1
6. You will be shown a list of all stocks with their Ticker symbols. You can also enter Quit if you do not want to proceed. Enter any stock Ticker correctly.
 - a. Type the stock TICKER
 - b. Microsoft(Ticker: MSFT)

- c. Google(Ticker: GOOGL)
- d. Apple(Ticker: AAPL)
- e. IBM(Ticker: IBM)
- f. Morgan Stanley(Ticker: MS)
- g. Amazon.com Inc(Ticker: AMZN)
- h. Bank Of America Corp(Ticker: BAC)
- i. DoorDash Inc - Class A(Ticker: DASH)
- j. Etsy Inc(Ticker: ETSY)
- k. JPMorgan Chase & Company(Ticker: JPM)
- l. MongoDB Inc - Class A(Ticker: MDB)
- m. Meta Platforms Inc - Class A(Ticker: META)
- n. Netflix Inc(Ticker: NFLX)
- o. U.S. Gold Corp(Ticker: USAU)
- p. Vodafone Group plc(Ticker: VOD)
- q. Warner Bros. Discovery Inc - Class A(Ticker: WBD)
- r. Finished adding stocks, create portfolio now. (Type Quit)

(Enter MSFT)

- 7. Enter the number of shares of that stock.
(Enter 10)
- 8. You will be shown the same list of tickers again. Keep entering stock Tickers and number of shares until you are done. Enter QUIT when done.
- 9. You will see a message saying "Successfully created portfolio."
- 10. The program will show you the initial menu again. Carry out the same steps to create a new portfolio with 2 different stocks.
- 11. Enter quit to create portfolio.
- 12. You will be shown the initial menu again, enter '3' to get the value of a portfolio by date.
- 13. Enter a name of an existing portfolio of which you want to get the value of.
- 14. Enter a valid date in YYYY-MM-DD format between 2022-06-13 and 2022-11-02
(Must be a business day).
- 15. You will be shown the initial menu again. Enter 4 to end program.

The images below will give a clearer picture of what is explained above.

```
luja@Sristikas-MacBook-Air res % java -jar Stocks.jar
```

What are you looking for today?

1. Create a portfolio.
2. View composition of a portfolio.
3. Get total value of a portfolio on a specified date.
4. Exit the program

Choose an option number:

1

Enter the name of portfolio: CHECK1

Type the stock TICKER

Microsoft(Ticker: MSFT)

Google(Ticker: GOOGL)

Apple(Ticker: AAPL)

IBM(Ticker: IBM)

Morgan Stanley(Ticker: MS)

Amazon.com Inc(Ticker: AMZN)

Bank Of America Corp(Ticker: BAC)

DoorDash Inc - Class A(Ticker: DASH)

Etsy Inc(Ticker: ETSY)

JPMorgan Chase & Company(Ticker: JPM)

MongoDB Inc - Class A(Ticker: MDB)

Meta Platforms Inc - Class A(Ticker: META)

Netflix Inc(Ticker: NFLX)

U.S. Gold Corp(Ticker: USAU)

Vodafone Group plc(Ticker: VOD)

Warner Bros. Discovery Inc - Class A(Ticker: WBD)

Finished adding stocks, create portfolio now. (Type Quit)

MSFT

Enter the number of shares you want to buy of this stock:

(Note: You can only buy whole number amount of shares)

10

Type the stock TICKER

Microsoft(Ticker: MSFT)

Google(Ticker: GOOGL)

Apple(Ticker: AAPL)

IBM(Ticker: IBM)

Morgan Stanley(Ticker: MS)

Amazon.com Inc(Ticker: AMZN)

Bank Of America Corp(Ticker: BAC)

DoorDash Inc - Class A(Ticker: DASH)

Etsy Inc(Ticker: ETSY)

JPMorgan Chase & Company(Ticker: JPM)

MongoDB Inc - Class A(Ticker: MDB)

Meta Platforms Inc - Class A(Ticker: META)

Netflix Inc(Ticker: NFLX)

U.S. Gold Corp(Ticker: USAU)

Vodafone Group plc(Ticker: VOD)

Warner Bros. Discovery Inc - Class A(Ticker: WBD)

Finished adding stocks, create portfolio now. (Type Quit)

USAU

Enter the number of shares you want to buy of this stock:
(Note: You can only buy whole number amount of shares)
20

Type the stock TICKER
Microsoft(Ticker: MSFT)
Google(Ticker: GOOGL)
Apple(Ticker: AAPL)
IBM(Ticker: IBM)
Morgan Stanley(Ticker: MS)
Amazon.com Inc(Ticker: AMZN)
Bank Of America Corp(Ticker: BAC)
DoorDash Inc - Class A(Ticker: DASH)
Etsy Inc(Ticker: ETSY)
JPMorgan Chase & Company(Ticker: JPM)
MongoDB Inc - Class A(Ticker: MDB)
Meta Platforms Inc - Class A(Ticker: META)
Netflix Inc(Ticker: NFLX)
U.S. Gold Corp(Ticker: USAU)
Vodafone Group plc(Ticker: VOD)
Warner Bros. Discovery Inc - Class A(Ticker: WBD)
Finished adding stocks, create portfolio now. (Type Quit)
NFLX

Enter the number of shares you want to buy of this stock:
(Note: You can only buy whole number amount of shares)
15

Type the stock TICKER
Microsoft(Ticker: MSFT)
Google(Ticker: GOOGL)
Apple(Ticker: AAPL)
IBM(Ticker: IBM)
Morgan Stanley(Ticker: MS)
Amazon.com Inc(Ticker: AMZN)
Bank Of America Corp(Ticker: BAC)
DoorDash Inc - Class A(Ticker: DASH)
Etsy Inc(Ticker: ETSY)
JPMorgan Chase & Company(Ticker: JPM)
MongoDB Inc - Class A(Ticker: MDB)
Meta Platforms Inc - Class A(Ticker: META)
Netflix Inc(Ticker: NFLX)
U.S. Gold Corp(Ticker: USAU)
Vodafone Group plc(Ticker: VOD)
Warner Bros. Discovery Inc - Class A(Ticker: WBD)
Finished adding stocks, create portfolio now. (Type Quit)
Quit

Successfully created portfolio.

What are you looking for today?

1. Create a portfolio.
2. View composition of a portfolio.
3. Get total value of a portfolio on a specified date.
4. Exit the program

Choose an option number:
1

Choose an option number:

1

Enter the name of portfolio: CHECK2

Type the stock TICKER

Microsoft(Ticker: MSFT)

Google(Ticker: GOOGL)

Apple(Ticker: AAPL)

IBM(Ticker: IBM)

Morgan Stanley(Ticker: MS)

Amazon.com Inc(Ticker: AMZN)

Bank Of America Corp(Ticker: BAC)

DoorDash Inc – Class A(Ticker: DASH)

Etsy Inc(Ticker: ETSY)

JPMorgan Chase & Company(Ticker: JPM)

MongoDB Inc – Class A(Ticker: MDB)

Meta Platforms Inc – Class A(Ticker: META)

Netflix Inc(Ticker: NFLX)

U.S. Gold Corp(Ticker: USAU)

Vodafone Group plc(Ticker: VOD)

Warner Bros. Discovery Inc – Class A(Ticker: WBD)

Finished adding stocks, create portfolio now. (Type Quit)

AMZN

Enter the number of shares you want to buy of this stock:

(Note: You can only buy whole number amount of shares)

2

Type the stock TICKER

Microsoft(Ticker: MSFT)

Google(Ticker: GOOGL)

Apple(Ticker: AAPL)

IBM(Ticker: IBM)

Morgan Stanley(Ticker: MS)

Amazon.com Inc(Ticker: AMZN)

Bank Of America Corp(Ticker: BAC)

DoorDash Inc – Class A(Ticker: DASH)

Etsy Inc(Ticker: ETSY)

JPMorgan Chase & Company(Ticker: JPM)

MongoDB Inc – Class A(Ticker: MDB)

Meta Platforms Inc – Class A(Ticker: META)

Netflix Inc(Ticker: NFLX)

U.S. Gold Corp(Ticker: USAU)

Vodafone Group plc(Ticker: VOD)

Warner Bros. Discovery Inc – Class A(Ticker: WBD)

Finished adding stocks, create portfolio now. (Type Quit)

DASH

Enter the number of shares you want to buy of this stock:

(Note: You can only buy whole number amount of shares)

3

Type the stock TICKER

Microsoft(Ticker: MSFT)

Google(Ticker: GOOGL)

Apple(Ticker: AAPL)

IBM(Ticker: IBM)

Morgan Stanley(Ticker: MS)

```

Type the stock TICKER
Microsoft( Ticker: MSFT)
Google( Ticker: GOOGL)
Apple( Ticker: AAPL)
IBM( Ticker: IBM)
Morgan Stanley( Ticker: MS)
Amazon.com Inc( Ticker: AMZN)
Bank Of America Corp( Ticker: BAC)
DoorDash Inc - Class A( Ticker: DASH)
Etsy Inc( Ticker: ETSY)
JPMorgan Chase & Company( Ticker: JPM)
MongoDB Inc - Class A( Ticker: MDB)
Meta Platforms Inc - Class A( Ticker: META)
Netflix Inc( Ticker: NFLX)
U.S. Gold Corp( Ticker: USAU)
Vodafone Group plc( Ticker: VOD)
Warner Bros. Discovery Inc - Class A( Ticker: WBD)
Finished adding stocks, create portfolio now. (Type Quit)
QUIT

Successfully created portfolio.

    What are you looking for today?
1. Create a portfolio.
2. View composition of a portfolio.
3. Get total value of a portfolio on a specified date.
4. Exit the program

Choose an option number:
3

Enter the name of portfolio: CHECK1
Please enter a valid date in YYYY-MM-DD format between 2022-06-13 and 2022-11-02 (Must be a business day)
2022-10-13

Total value of portfolio CHECK1 on 2022-10-13 is: 5901.249999999999

    What are you looking for today?
1. Create a portfolio.
2. View composition of a portfolio.
3. Get total value of a portfolio on a specified date.
4. Exit the program

Choose an option number:
3

Enter the name of portfolio: CHECK2
Please enter a valid date in YYYY-MM-DD format between 2022-06-13 and 2022-11-02 (Must be a business day)
2022-10-13

Total value of portfolio CHECK2 on 2022-10-13 is: 362.78999999999996

    What are you looking for today?
1. Create a portfolio.
2. View composition of a portfolio.
3. Get total value of a portfolio on a specified date.
4. Exit the program

Choose an option number:
4
luja@Sristikas-MacBook-Air res % █

```

Below is the list of stocks that the program supports:

1. Microsoft(Ticker: MSFT)
2. Google(Ticker: GOOGL)

3. Apple(Ticker: AAPL)
4. IBM(Ticker: IBM)
5. Morgan Stanley(Ticker: MS)
6. Amazon.com Inc(Ticker: AMZN)
7. Bank Of America Corp(Ticker: BAC)
8. DoorDash Inc - Class A(Ticker: DASH)
9. Etsy Inc(Ticker: ETSY)
- 10.JPMorgan Chase & Company(Ticker: JPM)
- 11.MongoDB Inc - Class A(Ticker: MDB)
- 12.Meta Platforms Inc - Class A(Ticker: META)
- 13.Netflix Inc(Ticker: NFLX)
- 14.U.S. Gold Corp(Ticker: USAU)
- 15.Vodafone Group plc(Ticker: VOD)
- 16.Warner Bros. Discovery Inc - Class A(Ticker: WBD)

Dates supported : All business days between 2022-06-13 and 2022-11-02 are supported.

Please **note** that the program assumes that today's date is 2022-11-02 (Due to limited data stored in the project data files.)