**String/File to Decimal Sum**

**Project Name:** ComcastInterview

**Files In the Project**:

1. MainClass
2. StringToDecimal
3. StringToDecimalTest

**Eclipse:** This project is developed on Eclipse IDE platform using Java 1.8 . Import this project into Eclipse to execute the project. Upon prompted, give the valid **text** file path where file is stored.

OR

**Command Prompt:** Execute the following commands in the command prompt.

1. Comment the package on top of MainClass.java and StringToDecimal.java
2. Type **javac \*.java** for compilation of both classes
3. Type **java MainClass** to run the application
4. Upon prompted, give the valid **text** file path where file is stored

**MainClass.java:**

This is the main class in java from where the execution of the project starts. It has two methods

1.main():

This method prompts the other method called **performOperations()** and also prompts the user to Continue or quit.

2. performOperations():

This method checks for the length of String and prompts the user till input is entered. It gives a bunch of options such as file, hexadecimal, normal string and executes the switch case which calls the specific methods in StringToDecimal class.

**StringToDecimal.java:**

This class has the main functionality which takes the input from the **performOperations()** and executes the following methods

1.stringToDecimal():

This method takes the default string. It Filters the string with numbers from 0 to 9 and calculates the sum of numbers in the string. It uses Lambda functions like **Function** to calculate the sum.

2.hexToDecimal():

This method takes the string. It Filters the string with numbers from 0 to 9 and digits from A-F.it calculates the sum of hexadecimal numbers in the string. It uses Lambda functions like **Function** to calculate the sum.

3.fileToDecimal():

This method takes the file. It reads the content of file into string and calls the **stringToDecimal()** to calculate the sum. It uses Streams to read the contents from file and store it to String.

**StringToDecimalTest.java**

This is a test class which has test cases for **StringToDecimal** class. Run this class to view the test cases status.

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**OUTPUT:**

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*COMCAST ASSESSMENT\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*String/File To Decimal Conversion\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Please enter -f to give file as input

Or Enter -x for conversion of Hexadecimal String

Or Enter the String:

1234567890[];',./=-)(\*&^%$#@!`~

Decimal value for sum of all numeric values in String is 45

Do you wish to continue, Please enter Y for Yes, N for No

y

Please enter -f to give file as input

Or Enter -x for conversion of Hexadecimal String

Or Enter the String:

-x

Please enter the string

1234567890abcdefghi

Decimal value for all values in Hexadecimal String is 120

Do you wish to continue, Please enter Y for Yes, N for No

y

Please enter -f to give file as input

Or Enter -x for conversion of Hexadecimal String

Or Enter the String:

-f

Please enter the file path

C:\Users\Dinesh Reddy\Desktop\Interview\ComcastInterview\src\com\comcastinterview\sourcecode\FileToDecimal.txt

Decimal value for all values in File is 69

Do you wish to continue, Please enter Y for Yes, N for No

y

Please enter -f to give file as input

Or Enter -x for conversion of Hexadecimal String

Or Enter the String:

-f

Please enter the file path

C:\Users\Dinesh Reddy\Desktop\Interview\ComcastInterview\src\com\comcastinterview\sourcecode\FileToDecim

Invalid Path Please try again

Do you wish to continue, Please enter Y for Yes, N for No

y

Please enter -f to give file as input

Or Enter -x for conversion of Hexadecimal String

Or Enter the String:

You forgot to enter the input,Please enter -f for file or -x for hexadecimal conversion or directly enter a String

1234567890

Decimal value for sum of all numeric values in String is 45

Do you wish to continue, Please enter Y for Yes, N for No

n

Exited! Thank You.

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