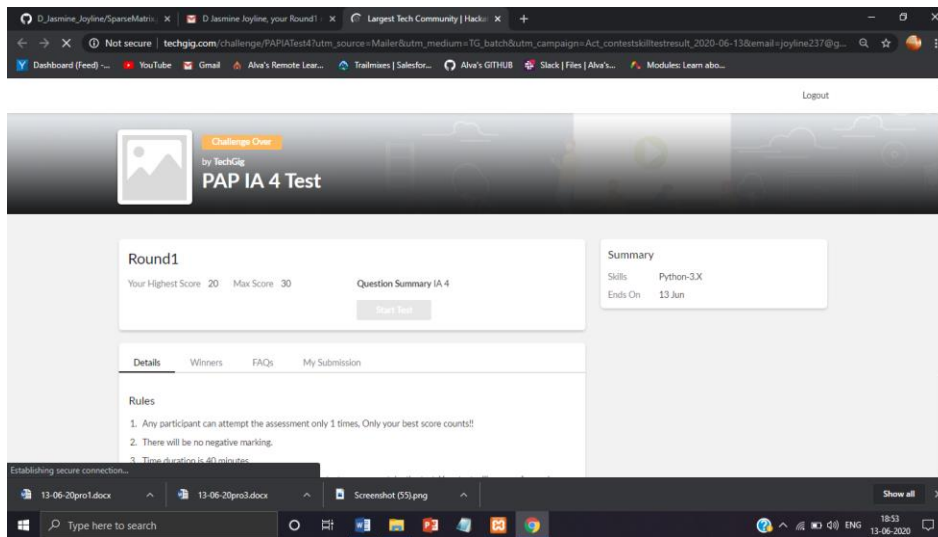


## DAILY ONLINE ACTIVITIES SUMMARY

<b>Date:</b>	13-06-2020	<b>Name:</b>	D Jasmine Joyline
<b>Sem &amp; Sec</b>	VI Sem A	<b>USN:</b>	4AL17CS024
<b>Online Test Summary</b>			
<b>Subject</b>	PAP		
<b>Max. Marks</b>	30	<b>Score</b>	20
<b>Certification Course Summary</b>			
<b>Course</b>	ONLINE JAVA MASTER CLASS		
<b>Certificate Provider</b>	eBOX	<b>Duration</b>	1.5hr
<b>Coding Challenges</b>			
<b>Problem Statement:</b> <ol style="list-style-type: none"> <li>1. Write a C Program to calculate Electricity Bill</li> <li>2. Write a Java Program to determine whether a given matrix is a sparse matrix</li> </ol>			
<b>Status:Completed</b>			
<b>Uploaded the report in Github</b>		<b>Yes</b>	
<b>If yes Repository name</b>		<a href="https://github.com/alvas-education-foundation/D_Jasmine_Joyline/tree/master/daily_progress">https://github.com/alvas-education-foundation/D_Jasmine_Joyline/tree/master/daily_progress</a>	
<b>Uploaded the report in slack</b>		<b>Yes</b>	

## Online Test Details:

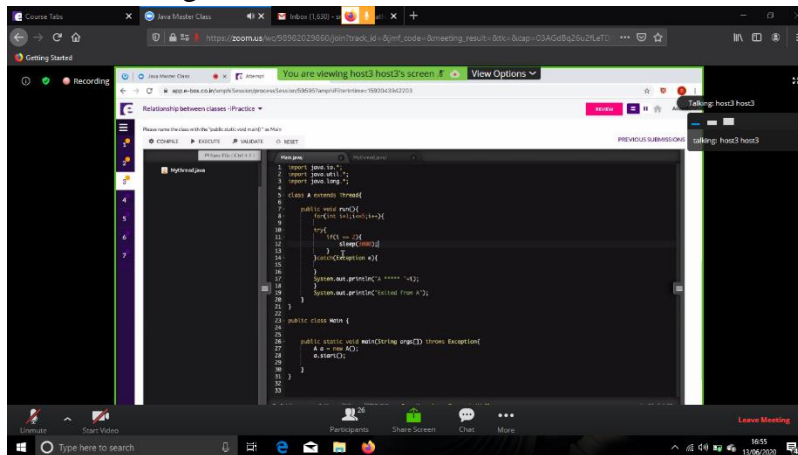


## Certification Course Details:

Online Java Master Class through Zoom-

Topics covered are:

- Multithreading



## Coding Challenges Details:

1. Write a C Program to calculate Electricity Bill

Given an integer U denoting the amount of KWh units of electricity consumed, the task is to calculate the electricity bill with the help of the below charges:

- 1 to 100 units – Rs. 10/- Per Unit

- 100 to 200 units – Rs. 15/- Per Unit
- 200 to 300 units – Rs. 20/- Per Unit
- above 300 units – Rs. 25/- Per Unit

Examples:

Input: U = 250

Output: 3500

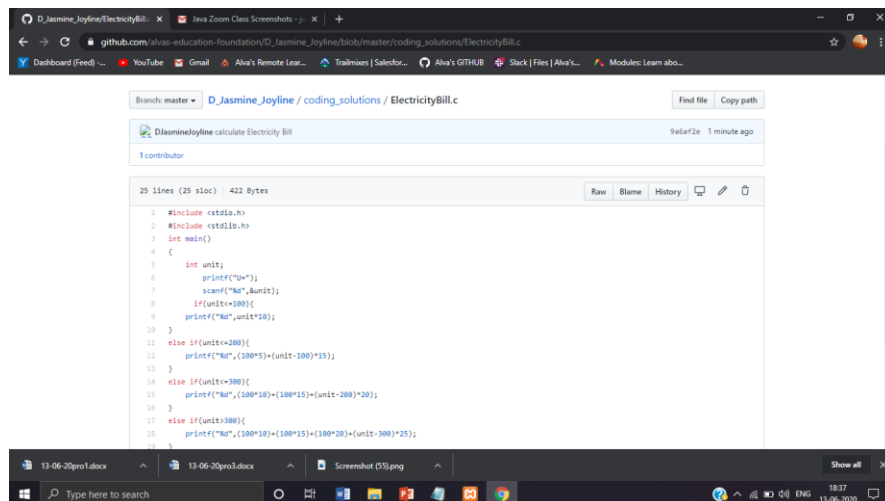
Explanation:

Charge for the first 100 units –  $10/100 = 1000$

Charge for the 100 to 200 units –  $15/100 = 1500$

Charge for the 200 to 250 units –  $20 \times 50 = 1000$

Total Electricity Bill =  $1000 + 1500 + 1000 = 3500$



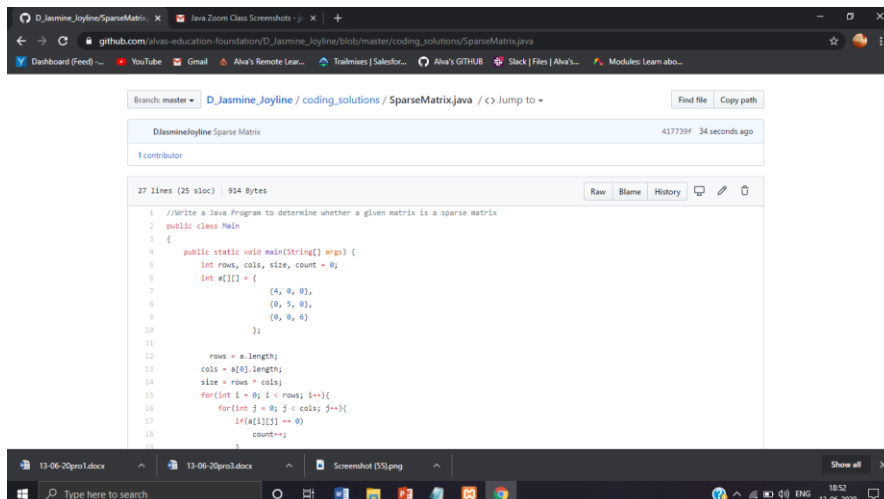
The screenshot shows a GitHub web interface for a repository named 'D\_Jasmine\_Joyline / coding\_solutions / ElectricityBill.c'. The file is 25 lines long, 25 sloc, and 422 Bytes. It is a C program that calculates an electricity bill based on the number of units consumed. The code includes standard headers, a main function, and conditional logic to calculate the bill based on the unit ranges defined in the problem statement.

```

1 #include <stdio.h>
2 #include <stdlib.h>
3 int main()
4 {
5     int unit;
6     printf("u=");
7     scanf("%d", &unit);
8     if(unit <= 100){
9         printf("Rs.", unit * 10);
10    }
11    else if(unit <= 200){
12        printf("Rs.", (100 * 10) + (unit - 100) * 15);
13    }
14    else if(unit <= 300){
15        printf("Rs.", (100 * 10) + (100 * 15) + (unit - 200) * 20);
16    }
17    else if(unit > 300){
18        printf("Rs.", (100 * 10) + (100 * 15) + (100 * 20) + (unit - 300) * 25);
19    }
20 }

```

2. Write a Java Program to determine whether a given matrix is a sparse matrix



The screenshot shows a GitHub web interface for a repository named 'D\_Jasmine\_Joyline / coding\_solutions / SparseMatrix.java'. The file is 27 lines long, 25 sloc, and 914 Bytes. It is a Java program that determines if a given matrix is sparse. A sparse matrix is defined as a matrix where most elements are zero. The code includes a main method that takes a matrix as input and counts the number of non-zero elements. If the count is zero, the matrix is considered sparse.

```

1 //Write a Java Program to determine whether a given matrix is a sparse matrix
2 public class Main
3 {
4     public static void main(String[] args) {
5         int rows, cols, size, count = 0;
6         int a[][] = {
7             {4, 0, 0},
8             {0, 5, 0},
9             {0, 0, 0}
10        };
11
12        rows = a.length;
13        cols = a[0].length;
14        size = rows * cols;
15        for(int i = 0; i < rows; i++){
16            for(int j = 0; j < cols; j++){
17                if(a[i][j] == 0)
18                    count++;
19            }
20        }
21    }
22 }

```