

Project Name: Online Judge

Course Title: Software Development Project-||

Course Code : ICT-3110

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Developed By:

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Introduction:

An online judge is an online system to test programs in programming contests. They are also used to practice for contests.

The system can compile and execute code, and test code with pre-constructed data. Submitted code may be run with restrictions, including time limit, memory limit, security restriction and so on. The output of the code will be captured by the system, and compared with standard output. The system will then return the result.

When mistakes are found in a standard output, the submission will be unsuccessful. User must correct any errors in the code, and resubmitted for re-judgment.

Objective:

The aim of competitive programming is to write source code of computer programs which are able to solve given problems. A vast majority of problems appearing in programming contests are mathematical or logical in nature. Every solution submitted by a contestant is run on the judge against a set of (usually secret) test cases. Normally, contest problems have an all-or-none marking system, meaning that a solution is "Accepted" only if it produces satisfactory results on all test cases run by the judge, and rejected otherwise.

Description:

When a user browses into this site, s/he will see following page like Fig 1.

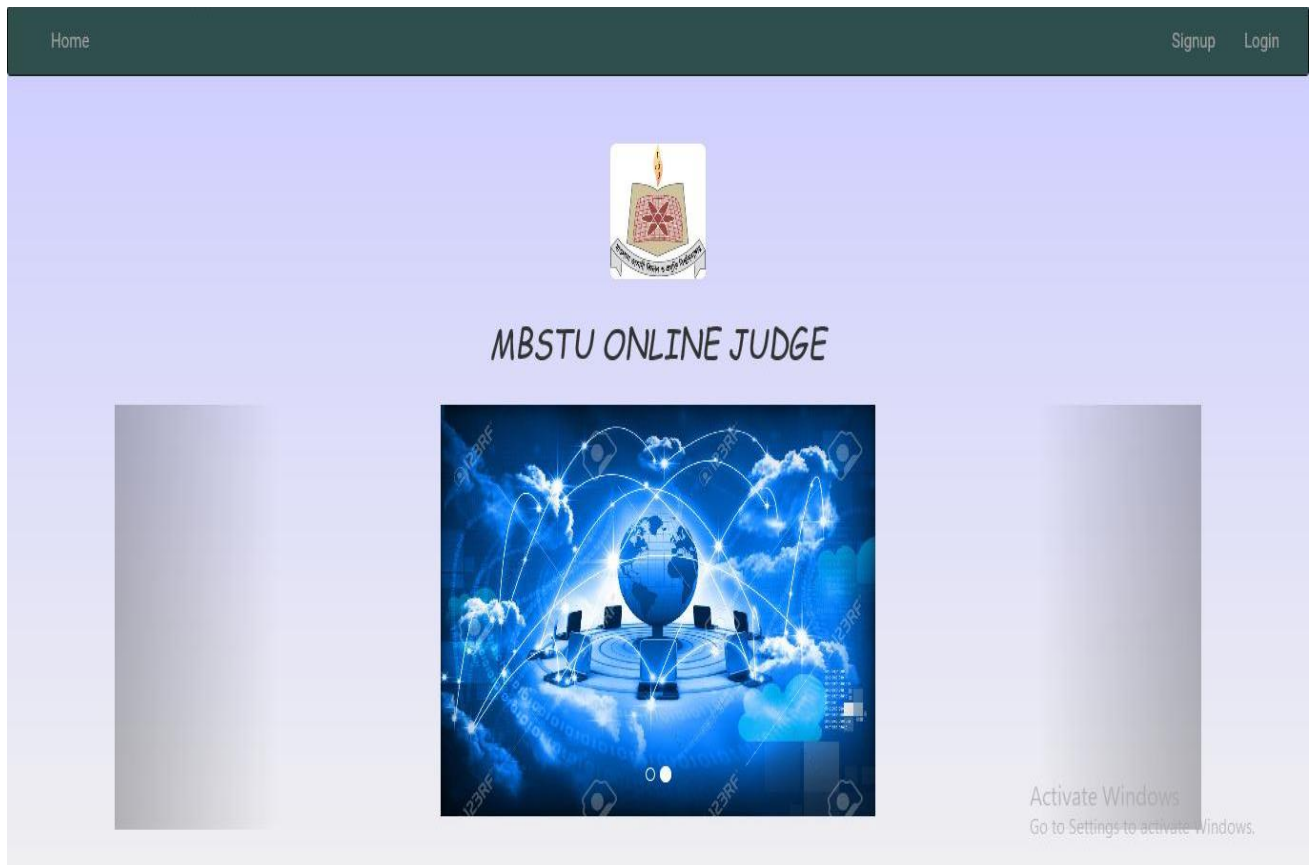
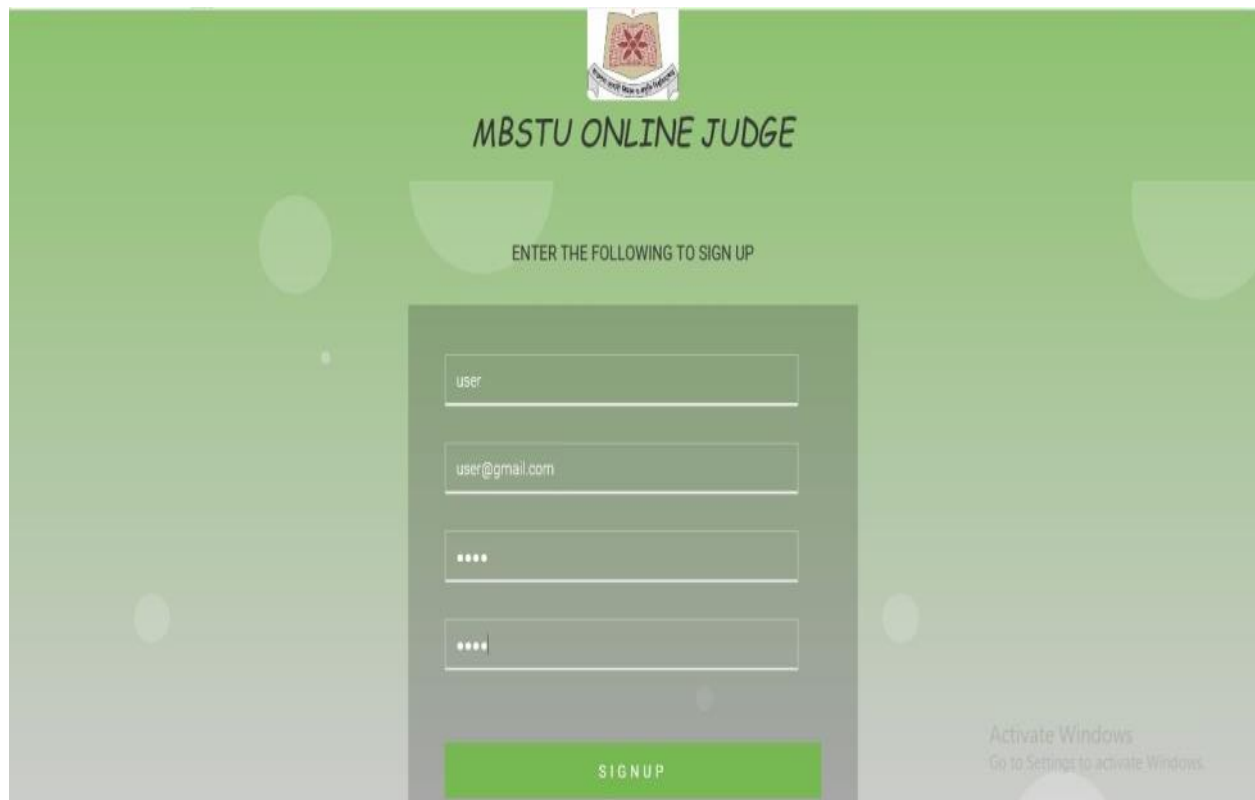


Fig 1. Home page of 'MBSTU Online judge'

When a user clicks on signup page on the navigation bar. S/he will see page like Fig. 2.



The image shows a web page for "MBSTU ONLINE JUDGE". At the top center is a logo featuring a shield with a red cross and a banner below it. Below the logo, the text "MBSTU ONLINE JUDGE" is displayed in a stylized font. Underneath this, the instruction "ENTER THE FOLLOWING TO SIGN UP" is shown. The main part of the page is a dark gray registration form with four input fields: a username field containing "user", an email field containing "user@gmail.com", a password field with four dots, and a confirm password field with four dots. A green "SIGNUP" button is located at the bottom of the form. In the bottom right corner, there is a watermark that says "Activate Windows Go to Settings to activate Windows."

Fig 2. Registration page of project

If registration is correct, then data will save in database like Fig.3 . Otherwise it will stay same page.

The screenshot displays a database management tool interface. At the top, the breadcrumb navigation shows 'Server: 127.0.0.1 » Database: ustudent » Table: student'. Below this is a toolbar with buttons for 'Browse', 'Structure', 'SQL', 'Search', 'Insert', 'Export', 'Import', 'Privileges', and 'More'. A green status bar indicates 'Showing rows 0 - 2 (3 total, Query took 0.0118 seconds.)'. The SQL editor contains the query 'SELECT * FROM `student`'. Below the editor are links for 'Profiling', 'Edit inline', 'Edit', 'Explain SQL', 'Create PHP code', and 'Refresh'. A control bar includes a 'Show all' checkbox, 'Number of rows' set to 25, a 'Filter rows' search box, and a 'Sort by key' dropdown set to 'None'. An expanded 'Options' section shows a table with 5 columns: 'serial_no', 'uname', 'mail', and 'upassword'. Each row has checkboxes for 'Edit', 'Copy', and 'Delete'. The table contains three rows of data. Below the table is a 'Check all' checkbox and a 'With selected' section with 'Edit', 'Copy', 'Delete', and 'Export' options. At the bottom, there is another control bar identical to the one above.

	serial_no	uname	mail	upassword
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	30	qqq	q@gmail.com	123
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	32	mkm	jinj@gmail.com	2345
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	34	user	user@gmail.com	1234

Fig 3. Database Table

After registration , welcome page will show and also show user name like Fig.4 .

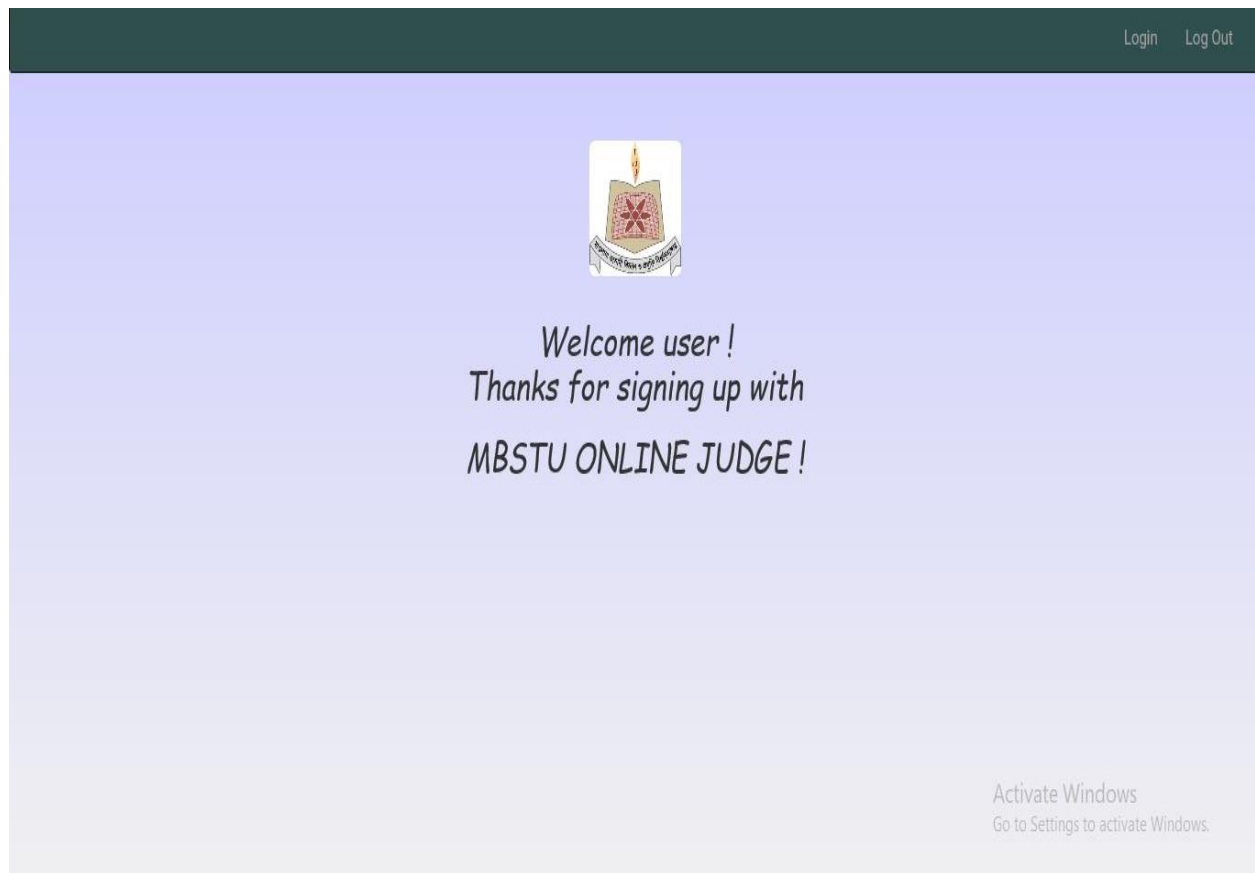


Fig 4. Welcome page

When a user clicks on the login on the navigation bar, then will show the following page like Fig.5.




The image shows a login page for 'MBSTU ONLINE JUDGE'. At the top center is a logo featuring a book with a flame above it, set within a shield-like emblem. Below the logo, the text 'MBSTU ONLINE JUDGE' is displayed in a stylized, handwritten font. Underneath this, the instruction 'ENTER THE FOLLOWING TO LOG IN' is centered. A central grey box contains the login form, which includes a text input field with the placeholder 'user', a password input field with four dots, and a green 'LOGIN' button. Below the button, the text 'Don't have an account! Create a new account' is visible. In the bottom right corner of the page, there is a watermark that reads 'Activate Windows Go to Settings to activate Windows.'

Fig.5 Login page of project

After login, problem set page will show like Fig.6.

[Home](#) [Problem Set](#) [Log Out](#)



MBSTU ONLINE JUDGE

Show entries

Serial no	Name
<input type="text" value="1001"/>	Score Validation
<input type="text" value="1002"/>	Area of a Circle
<input type="text" value="1003"/>	Difference
<input type="text" value="1004"/>	Salary
<input type="text" value="1005"/>	Simple Calculate
<input type="text" value="1006"/>	Distance Between Two Points

Activate Windows
Go to Settings to activate Windows.

Fig 6. Problem set Page

Problem set table in database like Fig.7 :

✓ Showing rows 0 - 1 (2 total, Query took 0.0371 seconds.)

```
SELECT * FROM `problem_set`
```

☐ Profiling [\[Edit inline\]](#) [\[Edit\]](#) [\[Explain SQL\]](#) [\[Create PHP code\]](#) [\[Refresh\]](#)

☐ Show all | Number of rows: 25 ▾ | Filter rows: Search this table | Sort by key: None ▾

+ Options

	serial_no	description	input	output
<input type="checkbox"/> Edit Copy Delete	1001	ead two integer values, in this case, the variable...	The input file contains 2 integer numbers.	sum 9
<input type="checkbox"/> Edit Copy Delete	1002	The formula to calculate the area of a circumf...	The input contains a value of floating point (doub...	A=12.56636


☐ Check all | With selected: [Edit](#) [Copy](#) [Delete](#) [Export](#)

☐ Show all | Number of rows: 25 ▾ | Filter rows: Search this table | Sort by key: None ▾

Fig 7. Problem set table in database

If a user clicks on any serial no (suppose 1001), then will show the description of the problem like Fig.8.

[Home](#) [Problem Set](#) [Log Out](#)



MBSTU ONLINE JUDGE

Read two integer values, in this case, the variables A and B. After this, calculate the sum between them and assign it to the variable sum. Write the value of this variable.

Input

The input file contains 2 integer numbers.

Output

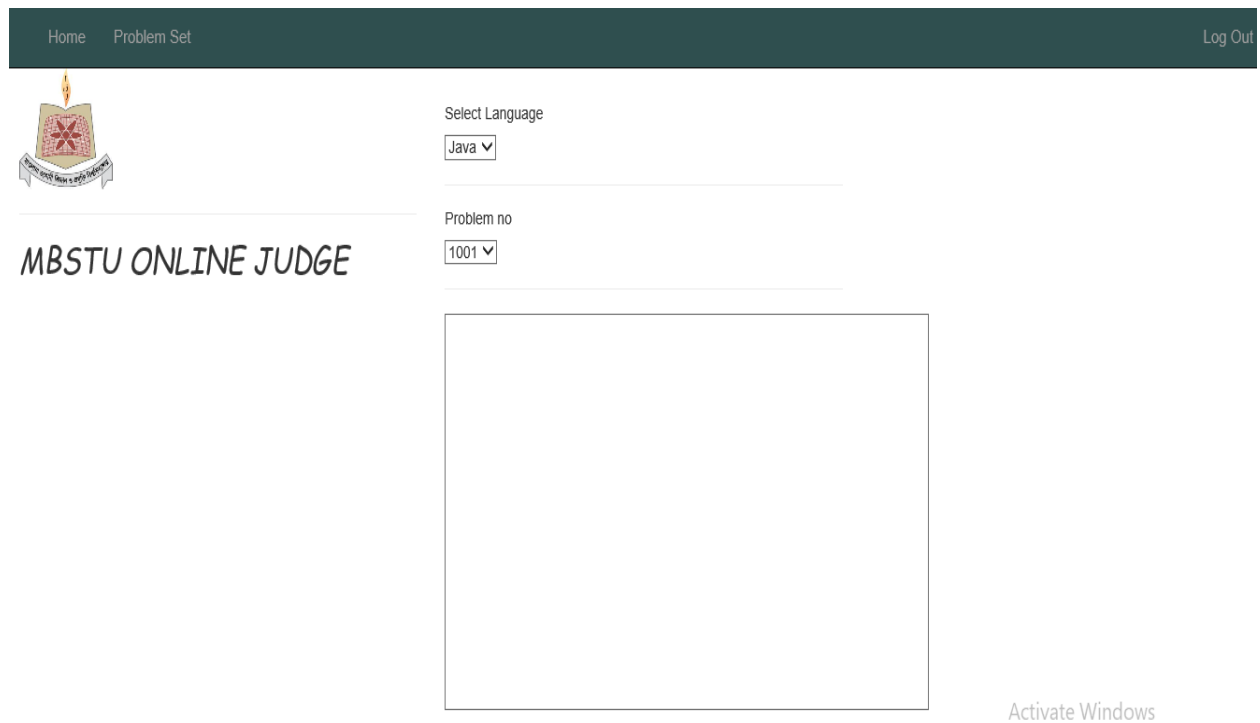
sum 9

[Submit](#)

Activate Windows
Go to Settings to activate Windows.

Fig 8. Description of the problem

When a user clicks on submit button , the following page will show like Fig.9.



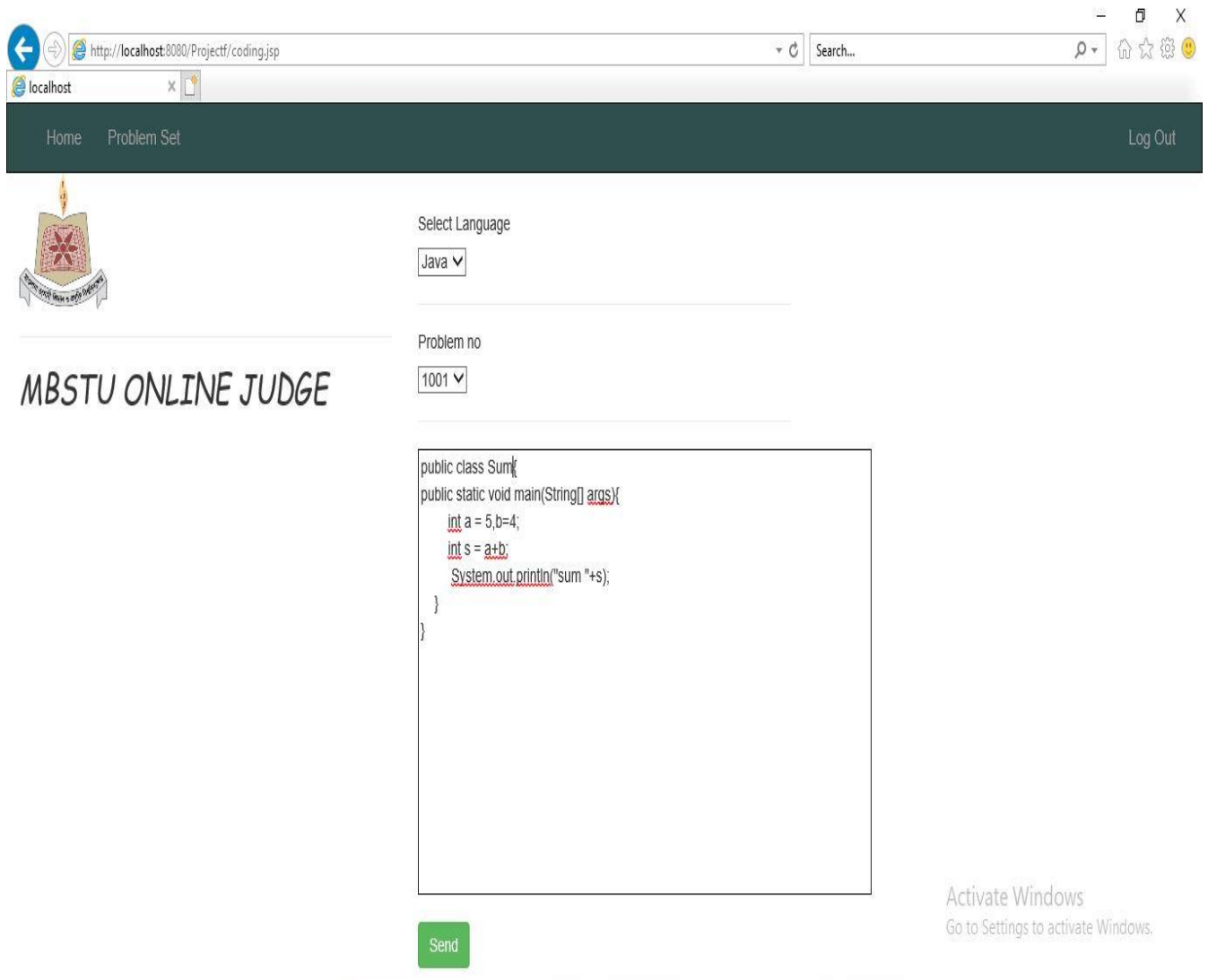
The screenshot shows the MBSTU Online Judge submission interface. At the top is a dark green navigation bar with links for 'Home' and 'Problem Set' on the left, and a 'Log Out' link on the right. Below the navigation bar, on the left, is the MBSTU logo featuring a book with a flame and a banner, with the text 'MBSTU ONLINE JUDGE' underneath. To the right of the logo, there are two dropdown menus: 'Select Language' with 'Java' selected, and 'Problem no' with '1001' selected. Below these menus is a large, empty rectangular box for code submission. In the bottom right corner of the page, there is a faint 'Activate Windows' watermark.

Fig 9. Submission page of code

User will select language , problem no and write code in this space.

When a user clicks on the send button , then will show the output .

Example : 01



The screenshot shows a web browser window with the URL `http://localhost:8080/Project/coding.jsp`. The page has a dark green header with "Home" and "Problem Set" links, and a "Log Out" button. Below the header is a logo of a book with a flame. The main content area includes a "Select Language" dropdown menu set to "Java", a "Problem no" dropdown menu set to "1001", and a large text area for code. The code in the text area is:

```
public class Sum{  
    public static void main(String[] args){  
        int a = 5,b=4;  
        int s = a+b;  
        System.out.println("sum "+s);  
    }  
}
```

Below the code text area is a green "Send" button. In the bottom right corner, there is a watermark that says "Activate Windows Go to Settings to activate Windows."



Output


accepted

MBSTU ONLINE JUDGE

Activate Windows
Go to Settings to activate Windows.

Example : 02

[Home](#) [Problem Set](#) [Log Out](#)



MBSTU ONLINE JUDGE

Select Language

Java ▼

Problem no

1001 ▼

```
public class Sump{
public static void main(String[] args){
    int a = 5,b=4;
    int s = a+b;
    System.out.println("sum "+s)
}
}
```

Send

Activate Windows
Go to Settings to activate Windows.



Output


Compilation error

MBSTU ONLINE JUDGE

Activate Windows
Go to Settings to activate Windows.

Example : 03

[Home](#) [Problem Set](#) [Log Out](#)



MBSTU ONLINE JUDGE

Select Language

Java ▼

Problem no

1001 ▼

```
public class Sump{  
public static void main(String[] args){  
    int a = 5,b=4;  
    int s = a+b;  
    System.out.println("sum"+s);  
}  
}
```

Send

Activate Windows
Go to Settings to activate Windows.



MBSTU ONLINE JUDGE

Output

Presentation error

Activate Windows
Go to Settings to activate Windows.

Project Executive:

1) Sabrin Afroz IT - 17007	Made database usable by connecting it through Hibernate. She used Core Java programming by Servlet.
2) Sadia Afrin IT - 17002	Give the concept to build this project. Add HTML/CSS features on web page.
3) Kazi Mujahid Muntasir IT - 17024	Add Bootstrap in establish web pages. Used JSP feature on core Java programming.
4) Anika Jahin IT - 17056	She used Servlet to connect the server. Also worked with Bootstrap.