

Project Name: Online Judge

GitHub Link :

https://github.com/SabrinAfroz/Online_Judge/tree/master

Course Title: Software Development Project-||

Course Code : ICT-3110

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.

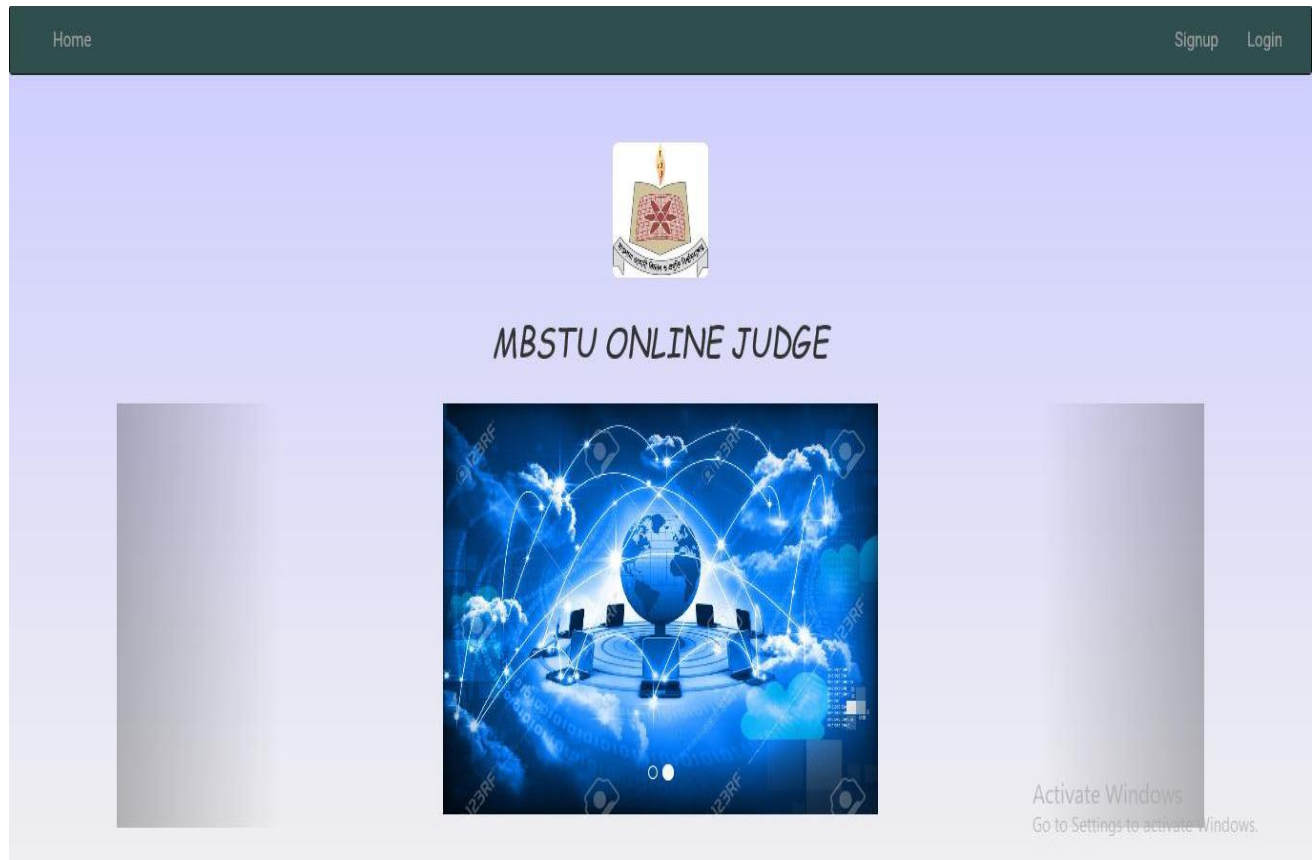
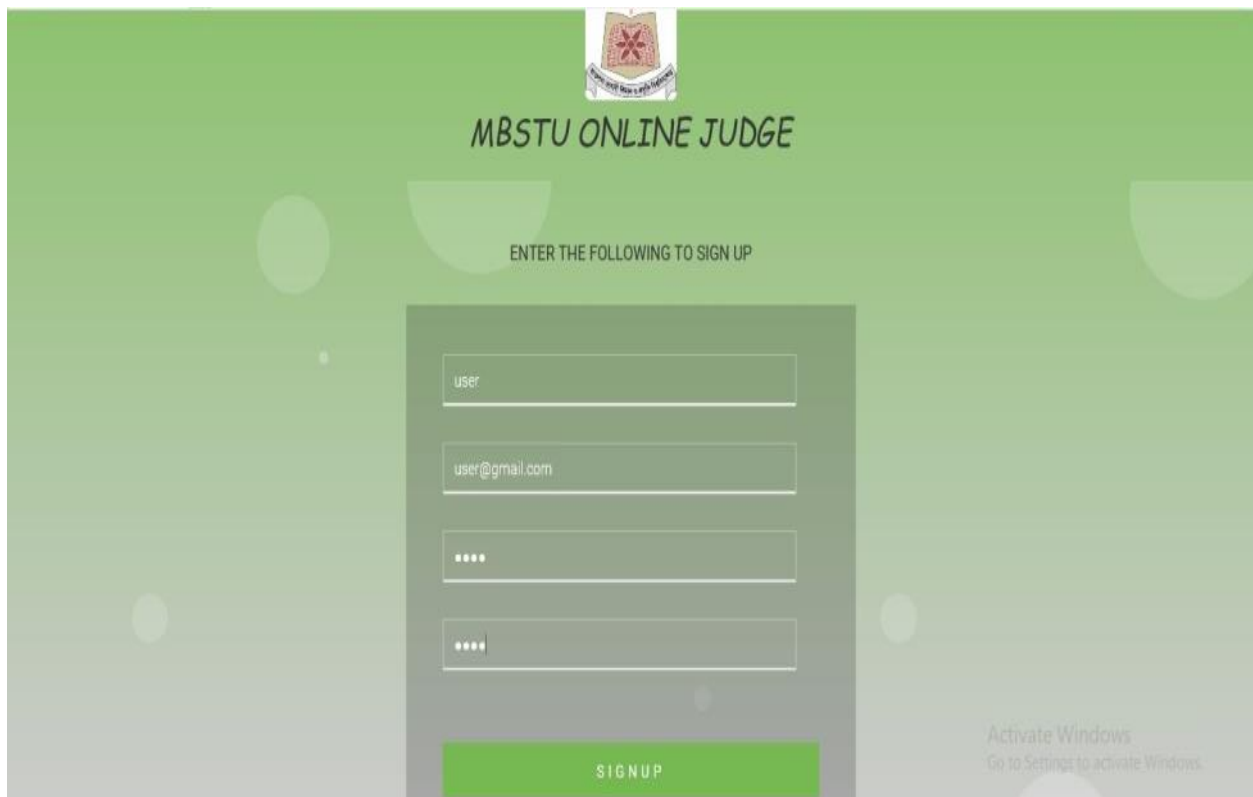


Fig 1. Home page of 'MBSTU Online judge'

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



The image shows a registration page for 'MBSTU ONLINE JUDGE'. At the top center is a logo featuring a book and a torch, with the text 'MBSTU ONLINE JUDGE' below it. The background is a solid green color. In the center, there is a dark green rectangular box containing the registration form. Above the form, the text 'ENTER THE FOLLOWING TO SIGN UP' is displayed. The form consists of four input fields: a username field with the placeholder 'user', an email field with the placeholder 'user@gmail.com', a password field with four dots, and a confirm password field with four dots. Below these fields is a green button labeled 'SIGNUP'. In the bottom right corner of the page, there is a watermark that reads '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 shows a database management interface for a server at 127.0.0.1, database 'ustudent', and table 'student'. The interface includes a toolbar with options like Browse, Structure, SQL, Search, Insert, Export, Import, Privileges, and More. A status bar indicates 'Showing rows 0 - 2 (3 total, Query took 0.0118 seconds.)'. The SQL query 'SELECT * FROM `student`' is entered. Below the query, there are checkboxes for 'Show all', 'Number of rows' (set to 25), 'Filter rows' (Search this table), and 'Sort by key' (None). The table data is displayed with columns: serial_no, uname, mail, and upassword. The data rows are:

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

Below the table, there are checkboxes for 'Check all', 'With selected', and buttons for 'Edit', 'Copy', 'Delete', and 'Export'. At the bottom, there are checkboxes for 'Show all', 'Number of rows' (set to 25), 'Filter rows' (Search this table), and 'Sort by key' (None).

Fig 3. Database Table

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

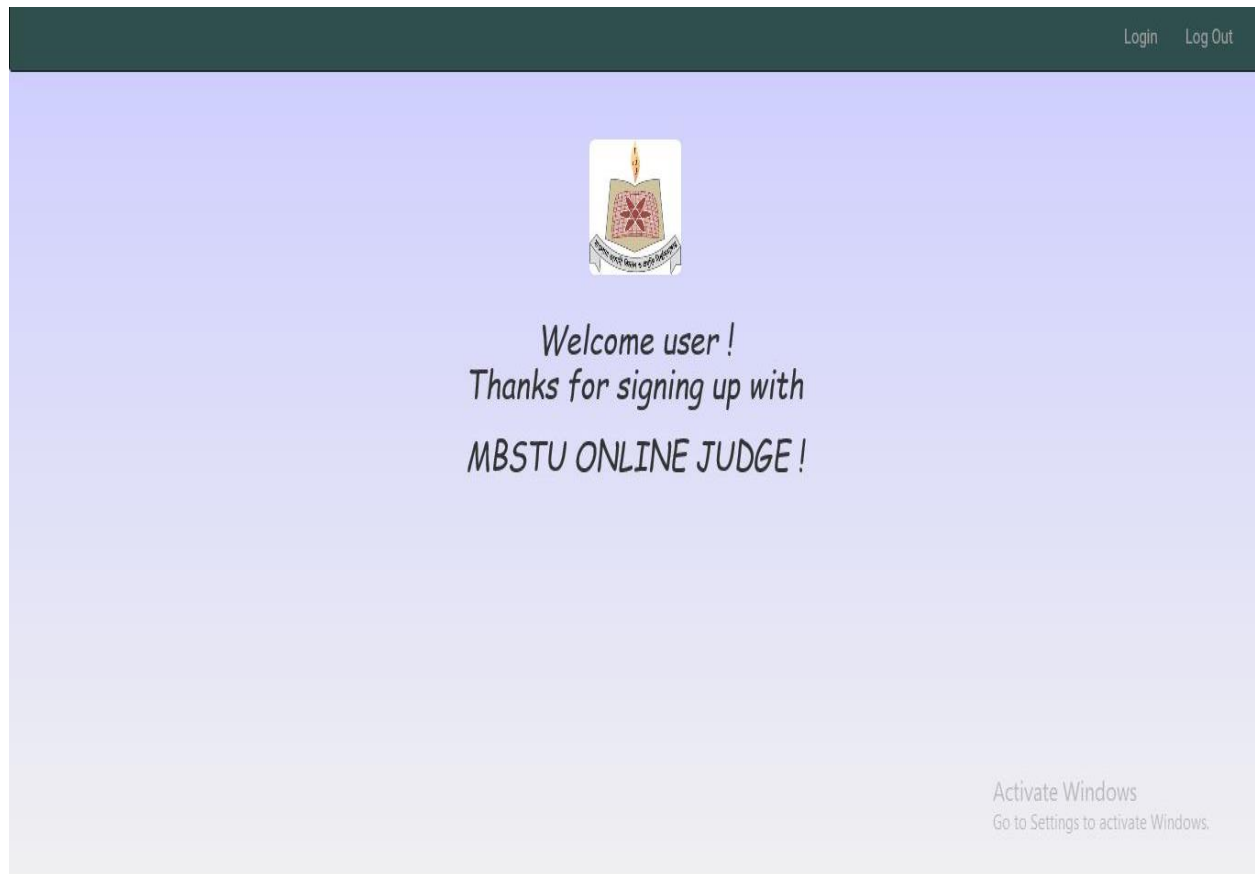


Fig 4. Welcome page

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 shield with a red cross and a book, with a banner below it. Below the logo, the text 'MBSTU ONLINE JUDGE' is displayed in a stylized font. Underneath, it says 'ENTER THE FOLLOWING TO LOG IN'. The login form is a dark gray box containing two input fields: the first is labeled 'user' and the second is for a password, indicated by four dots. Below these fields is a green 'LOGIN' button. At the bottom of the form, there is a link that says 'Don't have an account! Create a new account'. In the bottom right corner of the page, there is a watermark that says '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: | 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: | 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

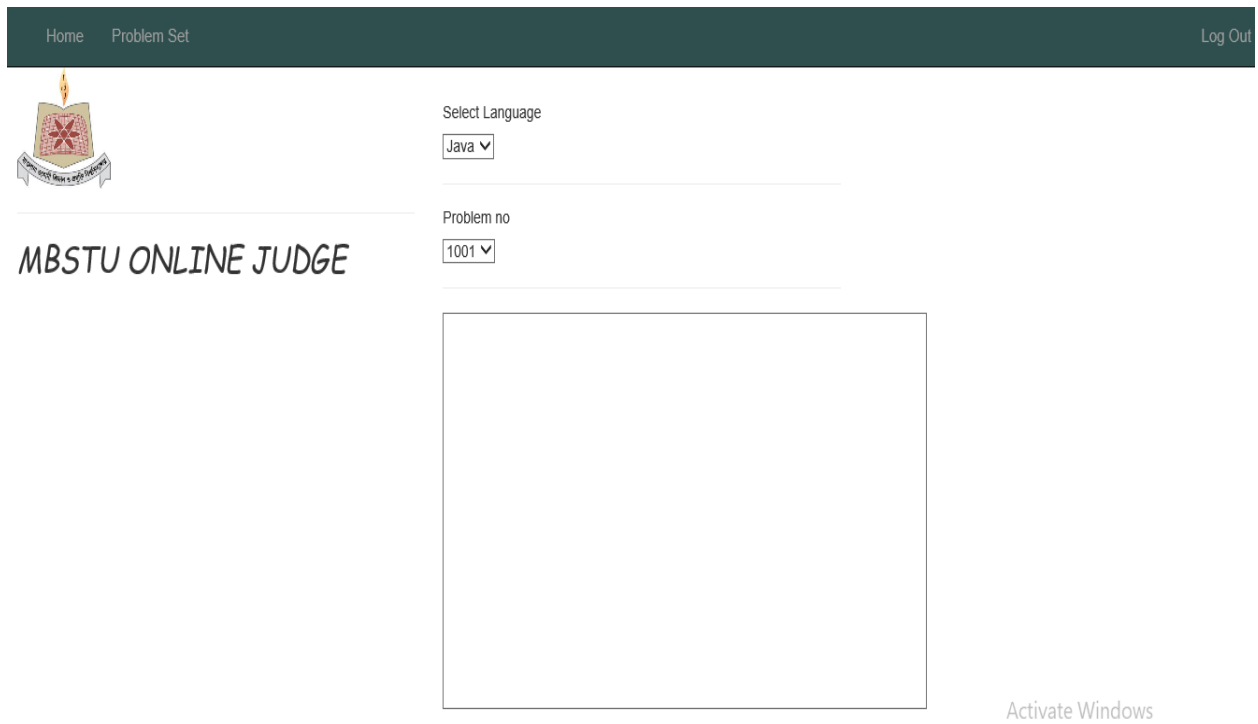
sum 9

[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.



Home Problem Set Log Out


MBSTU ONLINE JUDGE

Select Language
Java ▼

Problem no
1001 ▼

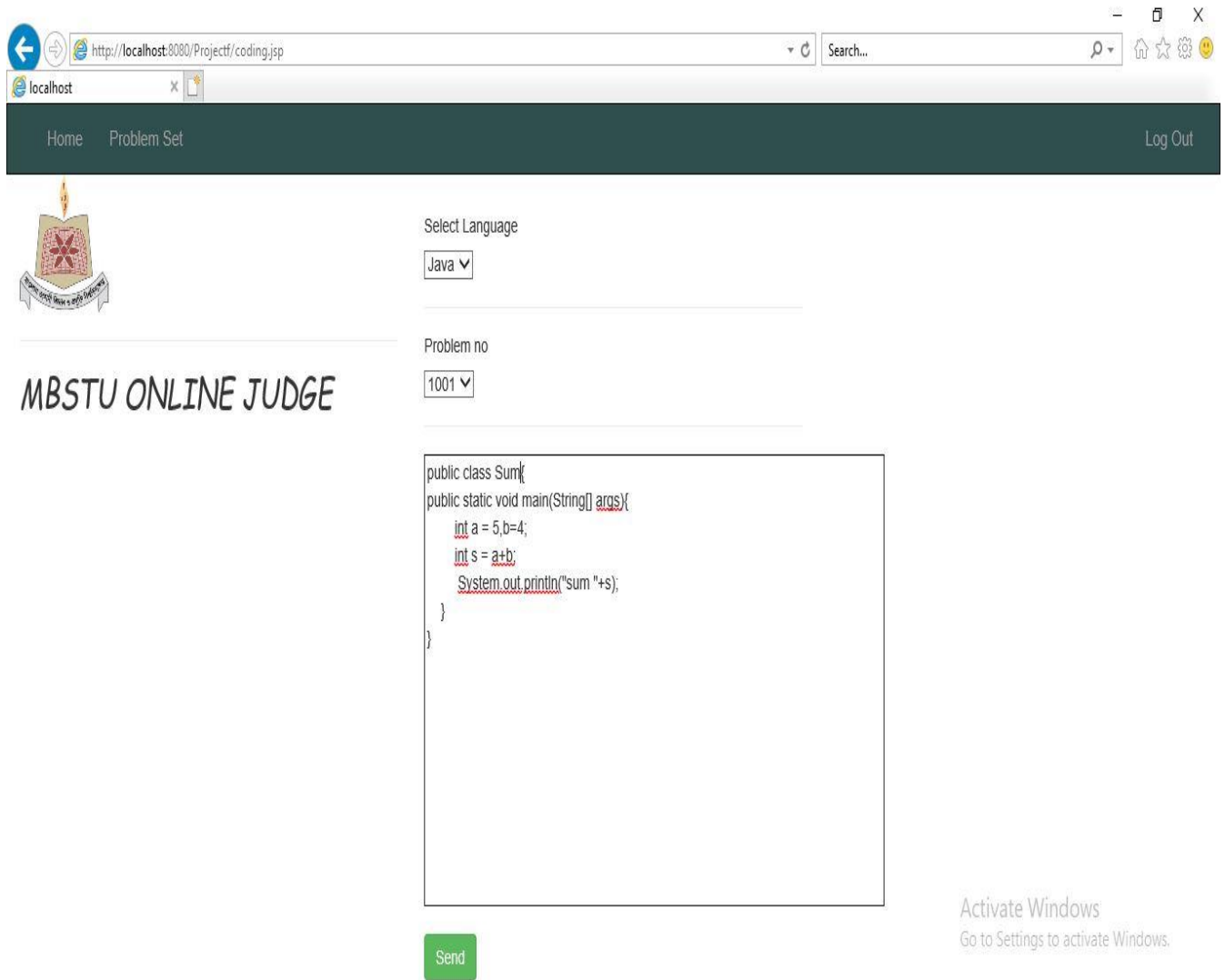
Activate Windows

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 address bar displaying `http://localhost:8080/Project/coding.jsp`. The page has a dark green header with navigation links "Home" and "Problem Set", and a "Log Out" button on the right. On the left side of the main content area, there is a logo of MBSTU (Mawlana Bhashani Science and Technology University) featuring a book and a torch, with the text "MBSTU ONLINE JUDGE" below it. 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 text area containing the following Java code:

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

At the bottom of the text area is a green "Send" button. In the bottom right corner of the page, there is a watermark that says "Activate Windows" and "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.



Output

Presentation error

MBSTU ONLINE JUDGE

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.

