



Faculty of Technology and Engineering

Computer Science and Engineering

Practical

Academic Year	:	2025-26	Semester	:	6
Course code	:	CSE312	Course name	:	Design of language processing

Practical - 1

1. Objective:

To implement a program that validates a user-input string against the regular expression a^*bb . The program should determine whether the input string is valid or invalid based on the defined pattern.

2. Program Code:

```

include<iostream>
using namespace std;

int main() {
    cout << "23CS047- Debdoot Manna";
    cout << "Enter string" << endl;
    string input;
    cin >> input;
    int length = input.length();
    for(int i = length - 1; i > length-3; i--) {
        if(input[i] != 'b'){
            cout << "Invalid String" << endl;
            return 0;
        }
    }
    for(int i=0; i<length-3; i++) {
        if(input[i] != 'a'){
            cout << "Invalid String" << endl;
            return 0;
        }
    }
    cout << "Valid String" << endl;
    return 0;
}

```

3. Output:

```
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS ⌂ Code + ⌂ ⌂ ⌂ ... |  
cd "/Users/debdootmanna/College/Sem 6 by college/DLP" && g++ 1.cpp -o 1 && "/Users/debdootmanna/College/Sem 6 by college/DLP/"1  
debdootmanna@Debdoots-MacBook-Air ~ > College > Sem 6 by college > DLP  
> cd "/Users/debdootmanna/College/Sem 6 by college/DLP" && g++ 1.cpp -o 1 && "/Users/debdootmanna/College/Sem 6 by college/DLP/"1  
23CS043 Debdoot Manna  
Enter string :  
aba  
Invalid String  
debdootmanna@Debdoots-MacBook-Air ~ > College > Sem 6 by college > DLP  
> cd "/Users/debdootmanna/College/Sem 6 by college/DLP" && g++ 1.cpp -o 1 && "/Users/debdootmanna/College/Sem 6 by college/DLP/"1  
23CS043 Debdoot Manna  
Enter string :  
abb  
Valid String  
debdootmanna@Debdoots-MacBook-Air ~ > College > Sem 6 by college > DLP  
>
```