



# 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
>
```