

**Practical : 01****AIM:**

---

**OUTPUT:**

```
Enter a string: ^
Invalid String
PS D:\Study\TY\6 SEM\CC>
Enter a string: bbbb
Invalid String
PS D:\Study\TY\6 SEM\CC>
Enter a string: aaa
Invalid String
PS D:\Study\TY\6 SEM\CC>
Enter a string: aaaaabb
Valid String
```

**CONCLUSION:**

## Practical : 02

**AIM:**

**OUTPUT:**

```
Number of input symbols :2
Input Symbol :a b
Number of state :4
Initial state : 1
Number of accepting states : 1
Accepting state : 2
Transition table :
1 to a-> : 2
1 to b-> : 3
2 to a-> : 1
2 to b-> : 4
3 to a-> : 4
3 to b-> : 1
4 to a-> : 3
4 to b-> : 2
abbabab
accepted
```

**CONCLUSION:**

## Practical : 03

**AIM:**

**OUTPUT:**

```
Enter your C code line by line. Type 'END' to finish.
> int main()
> int a=7,7H;
> //assign value
> char b ='x';
> /*return
> value*/return a+b;
> }
> END

TOKENS
Keyword: int
Identifier: main
Punctuation: (
Punctuation: )
Keyword: int
Error: a=7
Punctuation: ,
Error: 7H
Punctuation: ;
Error: //assign
Identifier: value
Keyword: char
Identifier: b
```

```
Identifier: b
Error: ='x'
Punctuation: ;
Error: /*return
Error: value*/return
Error: a+b
Punctuation: ;
Punctuation: }
```

### SYMBOL TABLE

- 1) main
- 2) value
- 3) b

### LEXICAL ERRORS

Total Errors: 3

**CONCLUSION:**

## Practical : 04

AIM:

OUTPUT:

```
D:\CC\Lex code>flex prac4.1.l
D:\CC\Lex code>gcc lex.yy.c -o prac4.1
D:\CC\Lex code>prac4.1
Enter the input string:
a1b22c3
1
22
3

D:\CC\Lex code>prac4.1
Enter the input string:
power operation -> 12 ** 3 = 1728
12
3
1728

D:\CC\Lex code>prac4.1
Enter the input string:
You multiply 804569 with 1 then will be :
804569
1
```

AIM:

**OUTPUT:**

```
D:\CC\Lex code>flex prac4.2.l
D:\CC\Lex code>gcc lex.yy.c -o prac4.2
D:\CC\Lex code>prac4.2
Enter the input text:
This is charusat.
This is university.

D:\CC\Lex code>prac4.2
Enter the input text:
Charusat is in Anand district.
university is in Anand district.

D:\CC\Lex code>prac4.2
Enter the input text:
Charusat , What is charusat?
university , What is university?

D:\CC\Lex code>prac4.2
Enter the input text:
Every where it is charusat , charusat and
Every where it is university , university and

D:\CC\Lex code>prac4.2
Enter the input text:
I am doing my BTech from CHARSAT.
I am doing my BTech from CHARSAT.
```

**AIM:**

**OUTPUT:**

```
D:\CC\Lex code>flex prac4.3.l
D:\CC\Lex code>gcc lex.yy.c -o prac4.3
D:\CC\Lex code>prac4.3 4.3.txt
Characters : 22
Words : 5
Lines : 1

D:\CC\Lex code>prac4.3 4.3.txt
Characters : 118
Words : 22
Lines : 4

D:\CC\Lex code>prac4.3 4.3.txt
Characters : 12
Words : 3
Lines : 3
```

**AIM:**

**OUTPUT:**

```
D:\CC\Codes\Lex code>flex prac4.4.l
D:\CC\Codes\Lex code>gcc lex.yy.c -o prac4.4
D:\CC\Codes\Lex code>prac4.4
Enter password: a@1T
Invalid password
D:\CC\Codes\Lex code>prac4.4
Enter password: aB1@
Invalid password
D:\CC\Codes\Lex code>prac4.4
Enter password: aaBB11,#cdefg2345
Invalid password
D:\CC\Codes\Lex code>prac4.4
Enter password: CHARUSAT
Invalid password
D:\CC\Codes\Lex code>prac4.4
Enter password: Charusat
Invalid password
D:\CC\Codes\Lex code>prac4.4
Enter password: CHArusat123
Invalid password
```

**CONCLUSION:**

## Practical : 05

**AIM:**

**OUTPUT:**

```
D:\Study\TY\6 SEM\CC>flex 5.l
D:\Study\TY\6 SEM\CC>gcc lex.yy.c -o 5
D:\Study\TY\6 SEM\CC>5
Keyword: int
Identifier: main
Punctuation: (
Punctuation: )
Punctuation: {
Keyword: int
Identifier: a
Operator: =
Constant: 5
Punctuation: ,
Constant: 7
Identifier: H
Punctuation: ;
Keyword: char
```

```
Identifier: b
Operator: =
String: 'x'
Punctuation: ;
Operator: /
Operator: *
Keyword: return
Identifier: value
Operator: *
Operator: /
Keyword: return
Identifier: a
Operator: +
Identifier: b
Punctuation: ;
Punctuation: }
```

**CONCLUSION:**