

CS6109 - COMPILER DESIGN – LAB

Week 4 – 13.09.2022 (Observations)

1. Write a Lex program to perform the following.

a. Reversing each line in a text file

Input:

```
HAI hello
example
good
alpha NUMeric
```

b. Matches one or more alphanumeric characters.

Input:

```
alphanumeric
ag@
hai123
123HELLO
example@2022
#good#
2
B
@
```

c. Matches the string starts with "b" followed by one or two occurrence of "an" and ends with zero or one occurrence of "a".

Input:

```
bana
banana
banaaa
bananana
banaa
ban
ba
banan
```

d. Find the capital letters for a given input string.

Input:

```
HelLo  
GoOD  
AlphA  
EXamPlE  
hAi An
```

2. Write a Lex program to identify the tokens for the given input expression.

a. $c = ++a + ++b$

b. $c = a ++ + ++b$

Note:

- Consider the inputs for each program from text file.
- Multiple input files can be considered.