## **Group-3 (Student ID: 1801048M-1701039F)**

Marks: 40 Time: 1.20Hrs

1. Write a C program to recognize strings those starting and ending with 'b' over  $\Sigma = \{b,c\}$ . (20)

Sample Input	Sample Output
Enter a string: bcb	Accepted
Enter a string: bccc	Rejected
Enter a string: cb	Rejected
Enter a string: bccb	Accepted

2. Write a C program to compute FIRST for the following grammar: (20)

$$S \rightarrow AB \mid bb$$

$$A \rightarrow da \mid B$$

$$B \rightarrow g \mid \epsilon$$

Sample Output	
First(S)= $\{b,d,g,\epsilon\}$	
$First(A) = \{d,g,\varepsilon\}$	
$First(B)=\{g, \varepsilon\}$	