13. Programs using Sequential and Random access

files. CO5: Create and process data in files using file I/O functions

- 1. Write a program to create a file and check whether the file is created successfully or not and then close the file.
- 2. Write a program to open and read text from a text file character by character and count the number of vowels in the given file.
- 3. Write a function to count number of words in a text file and test the function. 4. Write a program to create a file and then write some text into then file, after writing text file close the file. Again open the file in read mode and read all the written text. 5. Assuming that a text file named file1.txt contains some text written into it, write a function named copyUpper(), that reads the file file1.txt and creates a new file named file2.txt contains all words from the file file1.txt in uppercase
- 6. Write a program to read the name and percentage of 'n' different students. Calculate the grade according to following criteria and store the name, percentage and grade in a file. Open the file and display all the details.

```
Grade Calculation criteria:
if(percentage>=75)
Grade= first Division/distinction"
if(percentage>=45)
Grade= "Second Division";
else if(percentage>=35)
Grade= "Passed";
else
Grade= "Failed";
```

- 7. Write a program to demonstrate example of tellg() and tellp() function.
- 8. Write a program to copy the contents of one file to another file.
- 9. Write a program to write and read a single object value in the file using read and write function.
- 10. Write a program to write and read an array of objects in the file using read and write function.
- 11. Write a menu driven program. Create a file that holds details about set of items. Each item should have an item ID, item name and its price. The menu should have options

to create a file with set of items, append new item, delete existing item, update item price and display all the details.