FOSS-LAB-SET-5

1. Write a shell script to generate all 3 digit numbers that contain only the digits 0, 1, 2, 3. (number doesn't start with 0)

2. Write a program that analyzes Apache logs.

Display the number of bytes served by each path. Ignore unsuccessful page requests. If there are more than ten paths, display the first ten only.

Following is a sample line from an Apache access log.

```
92.50.103.52 - - [19/Aug/2018:08:26:43 -0400] "GET /perl/automated-testing/next_active.gif HTTP/1.1" 200 980 "http://example.com/perl/automated-testing/navigation_bar.htm" "Mozilla/5.0 (X11; U; Linux x86_64; en-US; rv:1.8.1.6) Gecko/20061201 Firefox/3.0.0.6 (Fedora); Blazer/4.0"
```

The two numbers following the HTTP/1.1 are the response code and the byte count. A response code of 200 means the request was successful. A byte count of - means no data was transferred.

(Test case Available in Folder '2')

3. Implement calculator to convert distances between (both ways) miles and kilometres. One mile is about 1.609 kilometres. User interface (distance.html) has one text-input, two radio-buttons, submit and reset buttons. Values are posted to a PHP-script (distance.php) which calculates the conversions according the user input.

Exam Report should be prepared with following contents.

A proper report is to be submitted after the examination. It should include at least the following:

- 1. A title page that includes subject, date, author name, roll no and University Register Number.
- 2. Problem statement.
- 3. Brief explanation of the theory related to your problem.

FOSS-LAB-SET-5

- 4. A description of your implementation. Explain in abstract terms (not program syntax) how it works and why you chose your particular solution to the problem. Show diagrams if you like.
- 5. Pointers to readable source files, executable files, and the shell commands used to compile, start the programs etc.
- 6. Informative listings of test runs, i.e. at least Three or Four test runs.
- 7. Listings of well-commented and well-structured programs.