UNIVERSITY OF RAJSHAHI

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

(FOR AFFILIATED COLLEGES)

B.Sc. Engineering Part III Odd Semester Exam -2020

CSE 3152: Computer Network Lab

Roll No: **Time: 03 Hours**

[Solve the marked two]

1. a) Building Ethernet cable (straight) and test.
   b) Find IP Address of your PC.
   c) Set IP address of PC1: 192.168.5.1 and PC2: 192.168.5.2 – ping from PC1 to PC2.
   d) Share a folder in PC1 and access it from PC2.
2. Write a program to send Message from PC1 to PC2 using java socket programming.
3. Simulate the operational difference of switch and hub in packet tracer.

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CSE 3132: Digital Signal Processing Lab

1. Draw the following sequences

(i) $x(t) = 5Cos\ 2\pi 100t$ 3.5

(ii) $x(n) = \delta(n-2)$ 3.5

(d) $x(n) = u(n+5)$ 3.5

2. Find DFT of the following 3.5

$x(t) = 3Cos\ 2000\pi t + 5Sin6000\pi t$

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Department of Computer Science & Engineering

B.Sc. Engineering Part III Odd Semester Lab Exam -2020

Course Code: CSE 3142

Course Title: Compiler design Lab

1. Build a lexical analyzer implementing the following regular expressions: 07

   a) Integer variable = (i-nI-N)(a-zA-Z0-9)*
   b) ShortInt Number = (1-9)|(1-9)(0-9)|(1-9)(0-9)(0-9)|(1-9)(0-9)(0-9)(0-9)
   c) Double Number = 0.(0-9)(0-9)(0-9)+|(1-9)(0-9)*.(0-9)(0-9)(0-9)+
   d) Character variable =ch_(a-zA-Z0-9)(a-zA-Z0-9)*

   Invalid Input or Undefined = Otherwise

2. Write a program to recognize C which converts a word of C program to its equivalent token. 07

   i) Keyword ii) Identifier iii) Operator iv) Constant

RESULT:

Input: 646.45	Output: Float
Input: do	Output: Keyword
Input: 554	Output: Integer
Input: abc	Output: Identifier
Input: +	Output: Arithmetic Operator

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Set -2

Dept. of Computer Science and Engineering
B. Sc. (Engg.) Part-3, Odd Semester, Examination 2020
Course: CSE 3122 (Database Management Systems Lab)

1. Create the following table using SQL DDL 2
   employee (*name, occupation, joining_date, working_hour*)
2. Write a single query to insert the following data into the employee table 2

Name	Occupation	Joining Date	Working Hour
Robin	Scientist	2020-10-04	12
Warner	Engineer	2020-10-04	13
Peter	Actor	2020-10-04	13
Marco	Doctor	2020-10-04	14

3. Write a database trigger for the ***employee*** table that will be invoked before each time any record is inserted and will convert any negative value for *working_hour* field to 0 (zero) and *working_hour* greater than 14 to 14. 2

Import the "world.sql" file into a MySQL database named "**world_db**". After importing the database, you will find three tables named *country*, *city* and *countryLanguage*. The *country* table has a primary key named *"Code"*, which is used as a foreign key for the *city* and *countryLanguage* table. Review the schema and content of the tables carefully and write queries to answer the following:

4. Find all the other countries in Asia whose life expectancy is less than the life expectancy of Bangladesh. 2
5. Find the total population of each Continent 2
6. Find the names and capitals of each country in the middle east. Country names should be in alphabetical order. 2
7. Find the names of all the countries in Africa where English is the official language 2

University of Rajshahi
Department of Computer Science and Engineering
CSE3162: Mobile Application Development Lab

Signup for www.weatherbit.io to get the API key and browse the API documentation, visit www.weatherbit.io/api/weather-current
Please visit the following link for the project template.
https://github.com/omarfaruqe/CSE3162.git
Fork the repo to your own GitHub account. Clone the project from **your** GitHub to the Android Studio and test the code by running the template project. Create branches for each individual work and merge them to the master branch.

1. Update UI so that it looks like the UI provided.
2. When Location button pressed, it will update the current geo location's (latitude & longitude) and find current city with that specific latitude & longitude.
3. Call the weather api to get the current weather (as json)
4. Perse the json received from API call to display/update appropriate information on UI
5. Finally push your code to **your** GitHub account and then send a pull request to me(https://github.com/omarfaruqe/CSE3162.git).