# CS699 Autumn 2013 Quiz-1 (The Mirror)

## YOUR NAME YOUR ROLL NUMBER

August 22, 2013

In this quiz, you will be generating, using latex, a PDF file which looks similar to this PDF file having the questions. You will also be storing all your answers in an svn repository you created for the quiz.

#### 1. Question-1: 2 marks

- Create a local svn repository (which will be accessed using "file://") within the directory "svn-repo-quiz1".
- You are given a directory called "quiz1-to-import", with some relevant files. Import this directory into svn (its contents will also be imported).
- Checkout the imported directory inside a working copy directory called "svn-work-quiz1". This is where you will be answering all the questions.
- You will finally be submitting a tgz of your svn repository as well as the working directory. As you go along answering the following questions, add the relevant files (only the relevant files; e.g. don't add dvi files) to svn and keep committing changes. Whenever you commit changes, make sure to add a short but meaningful log message. Submission instructions are in the next section.

#### 2. Question-2: 1 mark

Start editing your main latex file "quiz1-answer.tex", with the text content as in the questions PDF file (you can cut-paste this part). Generate the PDF version of the latex file as "quiz1-answer.pdf". This answer PDF should be similar in content to the PDF file with the questions (exact locations of page breaks, exact locations of figures are not important). Add "quiz1-answer.pdf" into the svn repository and commit.

#### 3. Question-3: 1 mark

Write the following equation in Latex.

$$e^x = \sum_{i=0}^{\infty} \frac{x^i}{i!}$$

#### 4. Question-4: 2+0.5 marks

Plot the following graph using gnuplot by editing the file "cdf-plot.gnu". Embed it in latex as eps or pdf; the exact position of the figure is not important. The relevant data is given in files "a1.csv" and "a2.csv"

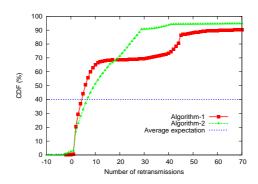


Figure 1: CDF of the number of retransmissions

#### 5. Question-5: 2+0.5 marks

Draw the butterfly diagram shown, using any drawing software. Note the symmetry in the figure. Embed it in latex as eps of pdf; ; the exact position of the figure is not important.

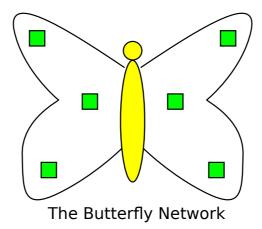


Figure 2: Depiction of a symmetric network graph

# 6. Question-6: 1 mark

Refer to the above graph and figure using Latex cross-reference in the following sentence.

"Figure 1 is a CDF plot while Figure 2 is a butterfly".

### 7. Optional [1 HP]

As shown in the next page, have latex divide the page into two columns.

## **Submission Instructions**

- 1. Commit to the svn repository from the working directory
- 2. From within the relevant directory, run "bash prepare-upload.sh"
- 3. Upload the file forupload.tgz created

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