# CS-213: Lab 10: LATEX Advanced Features

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In this lab you will learn to use LATEX to type mathematical formulas, draw graphics and make presentations.

- 1. Typeset following formulas.
  - (a) 974
  - (b) 4+2
  - (c)  $\sqrt[3]{5}$
  - (d)  $\frac{x}{y}$
  - (e)  $A^x y$
  - (f)  $\sum k = 1^n k$
  - (g)  $2 \neq 4$
  - (h)  $\phi \in \Psi$
  - (i)  $f(\xi)$
  - (j) CH<sub>3</sub>COOH
  - (k) 180°C
  - (1)  $\forall x \in \mathbf{R} : x^2 \ge 0$
  - (m)

$$\sum_{\substack{0 < i < n \\ j \subseteq i}}^{n} Q(i, j) = P(i, j) \times R(i, j)$$

- (n)  $\forall P \cdot [[P(0) \land \forall (k \in \mathbf{N}) \cdot [P(k) \implies P(k+1)]] \implies \forall n \in \mathbf{N} \cdot P(n)]$
- 2. Draw the following diagram shown in Figure 1 using TikZ.
- 3. Make a 4 slide presentation including title slide, and using pause and only command. Topic is the SSL project you have undertaken.

Make use of the manual provided if needed.

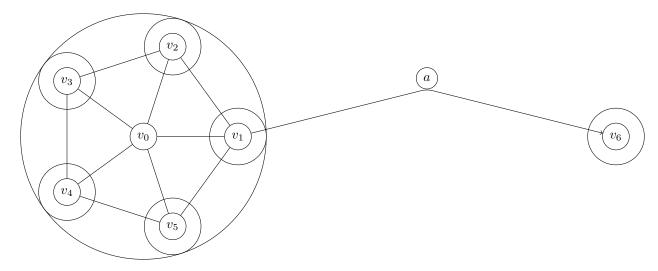


Figure 1: Figure containing nodes

## Compilation instructions

Use pdflatex rollno.tex to create rollno.pdf.

Use  $\left| \text{tar -czvvf rollno-lab-}10.\text{tar.gz rollno-lab-}10 \right|$  to create the tar ball.

#### Submission instructions

Create a folder called rollno-lab-10 containing

- 1. rollno.tex the source file,
- 2. rollno.pdf the output file,

Create a tar ball rollno-lab-10.tar.gz of this directory, and upload it.