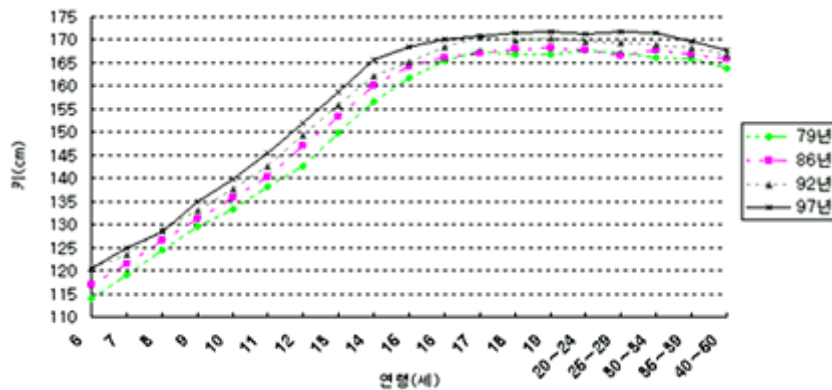


Midterm Exam Prep (I)

1. Plot & analysis of the data : average heights of the people in Korea
(<http://sizekorea.ats.go.kr>)

- (a) From the investigation of the people's heights in Korea with the age and sex, the development of the economy helped the children to grow more. The right table partly shows the heights of the people in Korea depending on the age, sex and years. Using the "height.txt" file, plot the following graphs and analyze.
- Man's heights & woman's heights in 1997 depending on the age into one proper graph using the layer merging function in origin.
 - Estimate the growth rates (cm/ages) of the people below the age of 16 from the graph above.



Age	Year	Height (cm)			
		1979	1986	1992	1997
6	Man	113.9	117	120.4	120.4
	Woman	112.5	116.4	118.7	119
7	Man	119.1	121.5	123.4	124.8
	Woman	117.4	119.8	121.7	122.5
8	Man	124.4	126.5	128.9	128.4
	Woman	124.1	125.3	127.3	127.6
9	Man	129.5	131.3	133	134.9
	Woman	127.5	131.2	133.4	134.1

- (b) Man's heights & woman's heights of the ages of 9, 12, 15 and 19 depending on the year. Estimate the growth rate of the heights depending on the year. (cm/year) Could you anticipate the people's heights in 2006?
- (c) In USA, the units of "feet" are used to denote the height of the people, try to convert the table using the excel program. (by using the concept of the relative address and the absolute address of the cell.)

2. Understanding the concept of the numerical data : The difference between "analog" and "digital".

- (a) Describe the differences between the analog data and the digital data in Korean or in English.
- (b) If you have some books in library, how can you convert those contents to the digital forms in computer?

Submission guide : please attach your results to this powerpoint file, compress the files into a zip file containing the ppt file, excel file in 1 (c) and the template file of the graph. And upload to the eku site. Please decorate the graph as possible as you can and save the template file of the graph.