

**Computer Engineering Department  
Bilkent University**

**CS533: Information Retrieval Systems**

Assignment No. 4

March 16, 2013

Due date: April 11, 2013; Thursday

*Luck favors the prepared mind.*

Pasteur

In this assignment we will cover some of the chapters of the book *The Art of Doing SCIENCE and Engineering: Learning to Learn* by Richard W. Hamming ([pdf](#)). (Link is updated on April 2, 2013. If you are satisfied with the security level of this link please try to find another one.)

Why do we do this exercise: "Doing science and engineering" requires style and this book is on that style, it is about the style of great scientists like Pasteur. For example, Yaşar Kemal says that he reads William Faulkner before starting a new work (see Ramazan Çiftlikçi *Yaşar Kemal: Yazar, Eser, Üslub*). Even great authors make each other more enthusiastic. If you know other books like Hamming's let me know.

1. We have five groups, in 3 groups there are 5 students and in 2 groups there are 6 students ( $3 \times 5 + 2 \times 6 =$  total of 27 students).
2. For each presentation we have 5 minutes and it will be followed by a brief Q&A session.
3. There is a group leader for each group ( $\approx$  randomly chosen, e.g. 5 minute presentation leaders are not a group leader again). The leader must coordinate the joint group work.
4. You must prepare a power point presentation and bring a one page handout to the classroom for your classmates.
5. Send me a copy of your presentation and the class handout on April 11 by 5:00 pm, both in pdf form. (With the email Subject Line: CS533 Hamming Presentation).
6. From each group by random drawing we will pick one student and that student will do the presentation.
7. I assigned a number of chapters to each group. Yes! you are assigned different number of chapters and they have different lengths. So "[Life's not fair!](#)"
8. Note that you have to present the essential parts (not everything) and your presentation must have a storyline. How to cover many chapters in five minutes? Use your common sense pick, for example, the chapter that is most enjoyable in your opinion and just present that chapter etc.
9. In the classroom I may give a survey for peer evaluation for evaluating your own group members: so please make sure that everybody contributes to the presentation.
10. We may also pick the best presentation with your votes as we did in 5 minute presentations.
11. Of course you cannot miss the presentation day.

Group No.	Group members (group leader name is in bold)	Chapter No.: Title
1	<b>Shatlyk Ashyralyev</b> , Anıl Armağan, Fatma Balcı, Fuat Basık, Fatih Çalışır	1: Orientation 2: Foundations of the Digital (Discrete) Revolution 3: History of Computer Hardware
2	<b>Eren Gölge</b> , Tolga Çekiç, Elif Dal, Erdiñ Acar, Tunç Gültekin	10: Coding Theory-I 11: Coding Theory-II
3	<b>Mert Emin Kalender</b> , Havva Gülay Gürbüz, Ahmet İçcen, Basri Kahveci, Cristina Kirchner	12: Error Correcting Codes 13: Information Theory
4	<b>Üstün Özgür</b> , Burak Kocuroğlu, Emin Yiğit Köksal, Ömer Perçin, Amir Rahimzadeh Ilkhechi, Yağız Salor	12: Creativity 13: Experts
5	<b>Mustafa İlker Saraç</b> , Hakan Sözer, Muhammed Yağmur Şahin, Rıdvan Tekdoğan, Çağlar Terzi, Arif Usta	27: Unreliable Data 29: You Get What You Measure 30: You and Your Research