

*10 – February – 2022 – Week6*

The problems and subjects in this part, has been prepared especially for you to equip yourself for the interview process and improve your coding skills. To get the most from this part, it’s highly recommended to be prepared and present the topics in English / German.

At first, it can be difficult to present in English / German and you can read from your notes, no problem. We strongly advise you to force yourself to present especially the interview questions in English / German. However, if you don’t feel you can present in English / German, you can do any part in Turkish, that’s no problem too.

Please remember; we don’t want to put extra pressure to anyone, it’s totally up to you how you prepare for this section. The main and only aim of this part is to develop your skills that you need during and after the recruitment process and make you ready for the DS career.

**Questions Related to Course Topics**

Problems, interview questions and related course topics within the week or sprint term.

**1. Please work on the exercises below. (Make your own copy!)**

* GSS Practise [for](https://docs.google.com/spreadsheets/d/1V8h_LqWp8aLiMBKnWyIndeui3ImNX0ZAcC48xcOupGE/edit#gid=1888460731) Week-2nd

**2. In how many ways, a group of 3 boys and 2 girls can be formed out of a total of 5 boys and 5 girls?**

**3. A woman has 6 blouses, 4 skirts, and 5 pairs of shoes. How many different outfits consisting of a blouse, a skirt, and a pair of shoes can she wear?**

**4. Serena Williams won the 2010 Wimbledon Ladies’ Singles Championship. For the seven matches she played in the tournament, her total number of first serves was 379, total number of good first serves was 256, and total number of double faults was 15.**

a. Find the probability that her first serve is good.

b. Find the conditional probability of double faulting, given that her first serve resulted in a fault.

c. On what percentage of her service points does she double fault?

**5. Suppose that in the world exist a very rare disease. The chance for anyone to have this disease is 0.1%. You want to know whether you are infected so you go take a test, and the test results come positive. The accuracy of the test is 99%, meaning that 99% of the people who have the disease will test positive, and 99% of the people who do not have the disease will test negative. What is the chance that you are actually infected? *.......Bayes Theory*.....**

#### ****Interview Questions Related to Course Topics****

**6. What is Bayes' Teorem?**

**7. What do you mean by confidence interval in statistical analysis?**

|  |  |  |
| --- | --- | --- |
| **Project Discussion** |  |  |

* [GSS - Assignment - 1 (Statistical Measures)](https://lms.clarusway.com/course/view.php?id=7162#section-1)
* [GSS - Assignment - 2](https://lms.clarusway.com/course/view.php?id=7162#section-1)
* [GSS - Assignment - 3](https://lms.clarusway.com/course/view.php?id=7162#section-1)
* [Flipgrid-4 (Explain VLOOKUP in common terms?)](https://flipgrid.com/de8525bd)