# Q1 Tell about yourself

Hello everybody. My name is Şafak. we have met before. I live in germany. I started learning German 3 months ago. Now I will speak both English and German. I'm an electronic engineer. I worked in the field of information technologies for 6 years. I have a PhD in image processing. I am interested in AWS and deep learning. I hope to improve my technical knowledge and foreign language at the end of this course and get a job in this field in a short time. I would like to thank our teachers and mentors for offering this opportunity. I wish success to all my friends on the course. see you soon.

Hallo zusammen. Ich heiße Şafak. wir haben uns schon mal getroffen. Ich lebe in Deutschland. Ich habe vor 3 Monaten angefangen Deutsch zu lernen. Jetzt werde ich sowohl Englisch als auch Deutsch sprechen. Ich bin ein Elektronikingenieur. Ich habe 6 Jahre im Bereich Informationstechnologien gearbeitet. Ich habe einen Doktortitel in Bildverarbeitung. Ich interessiere mich für AWS und Deep Learning. Ich hoffe, meine technischen Kenntnisse und meine Fremdsprache am Ende dieses Kurses zu verbessern und in kurzer Zeit einen Job in diesem Bereich zu bekommen. Ich möchte unseren Lehrern und Mentoren dafür danken, dass sie diese Gelegenheit angeboten haben. Ich wünsche allen meinen Freunden auf dem Kurs viel Erfolg. bis bald.

### Q2 What is a computer?

and now third video. what is a computer? Computer is a device that includes hardware and software. In daily life we have a lot of computers around us. For example mobile phones, wash machines, television, even our cars. All of them do basically the same thing. They take inputs, store, process and give an output. Computers work according to binary number system. 0 (zero) or 1 (one). There are only two situations. Is there any electricity or not? open or closed? While expressing 2 situations with 1 bit, we can express 4 situaitons with 2 bits. The more bits we use, the more information we can express.

und jetzt drittes Video. was ist ein Computer? Computer ist ein Gerät, das Hardware und Software enthält. Im täglichen Leben haben wir viele Computer um uns herum. Zum Beispiel Handys, Waschmaschinen, Fernseher, sogar unsere Autos. Alle machen im Grunde das Gleiche. Sie nehmen Eingaben auf, speichern, verarbeiten und geben eine Ausgabe. Computer arbeiten nach dem Binärzahlensystem. 0 (Null) oder 1 (Eins). Es gibt nur zwei Situationen. Gibt es Elektrizität oder nicht? Offen oder geschlossen? Während wir 2 Situationen mit 1 Bit ausdrücken, können wir 4 Situationen mit 2 Bits ausdrücken. Je mehr Bits wir verwenden, desto mehr Weitere Informationen können wir ausdrücken.

### Q3 How may you represent data in a computer?

The name of the smallest data size unit on the computer is bit. Bits can be either 0 (zero) or 1 (one). For the computer, 0 (zero) means there is no electricity, while 1 (one) means there is electricity. If we want to express a word, picture or sound on the computer, we have to convert them to zeros and ones. According to the ASCII table, each character has a counterpart in the binary number system. The pictures are represented by red, green and blue colors, each of which is 8 (eight) bits. The sound is converted into bits with analog digital converters.

Der Name der kleinsten Datengrößeneinheit auf dem Computer ist Bit. Bits können entweder 0 (Null) oder 1 (Eins) sein. Für den Computer bedeutet 0 (Null), dass kein Strom vorhanden ist, während 1 (Eins) bedeutet, dass Strom vorhanden ist. Wenn wir ein Wort, ein Bild oder einen Ton auf dem Computer ausdrücken möchten, müssen wir sie in Nullen und Einsen konvertieren. Gemäß der ASCII-Tabelle hat jedes Zeichen ein Gegenstück im Binärzahlensystem. Die Bilder werden durch rote, grüne und blaue Farben dargestellt, von denen jede 8 (acht) Bits umfasst. Der Ton wird mit analogen Digitalwandlern in Bits umgewandelt.

### Q4 What is SDLC and benefits of it?

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### Q5 What SDLC phases do you know?

SDLC generally has 6 phases. These are requirements, design, development, testing, deployment and maintenance. Sometimes this phases may change between four and eight. Regardless of whether it is 4 or 8, what is trying to be explained is similar. In the first phase, you collect the requirements of the project from the customer. A design is made according to these requirements. You decide which software language or database to use. Then the coding process begins. This is the development phase. Then the developed code is tested. The software is delivered to the customer for use after the test phase. Finally, the maintenance phase begins. Maintenance support is provided to the project throughout the life of the project.

SDLC hat im Allgemeinen 6 Phasen. Dies sind Anforderungen, Design, Entwicklung, Test, Bereitstellung und Wartung. Manchmal können sich diese Phasen zwischen vier und acht ändern. Unabhängig davon, ob es 4 oder 8 ist, was versucht zu erklären, ist ähnlich. In der ersten Phase sammeln Sie die Anforderungen des Projekts vom Kunden. Ein Design wird gemäß diesen Anforderungen hergestellt. Sie entscheiden, welche Softwaresprache oder Datenbank verwendet (benutzt) werden soll. Dann beginnt der Codierungsprozess. Dies ist die Entwicklungsphase. Dann wird der entwickelte Code getestet. Die Software wird dem Kunden zur Verwendung nach der Testphase geliefert. Schließlich beginnt die Wartungsphase. Das Projekt wird während der gesamten Projektlaufzeit bei der Wartung unterstützt.

### Q6 What is Agile? How do you apply?

Agile is a project management system that increases the success rate of the project. It can be applied in all areas of life. Agile philosophy requires a new perspective. There is an Agile manifesto published on this subject in 2001. There are 4 important points in this manifesto. Individuals and interactions, working software, customer cooperation, responding to change. Then, principles were produced from this manifesto. For example: customer satisfaction, Self organizing teams, face to face communication, motivating employees are among these principles. Agile is a goal. Methods such as Scrum and Kanban are examples of tools used to achieve this goal.

Agile ist ein Projektmanagementsystem, das die Erfolgsquote des Projekts erhöht. Es kann in allen Lebensbereichen angewendet werden. Agile Philosophie erfordert eine neue Perspektive. Zu diesem Thema wurde 2001 ein agiles Manifest veröffentlicht. Dieses Manifest enthält 4 wichtige Punkte. Individuen und Interaktionen, funktionierende Software, Kundenkooperation, Reaktion auf Veränderungen. Dann wurden aus diesem Manifest Prinzipien erzeugt. Zum Beispiel: Kundenzufriedenheit, selbstorganisierende Teams, persönliche Kommunikation, motivierende Mitarbeiter gehören zu diesen Prinzipien. Agilität ist ein Ziel. Methoden wie Scrum und Kanban sind Beispiele für Werkzeuge, mit denen dieses Ziel erreicht werden kann.

### Q7 How would you define teamwork?

There are proverbs about helping eachother in every language. If I am not mistake, there was a proverb in English "One hand washes the other". It expresses the idea that mutual cooperation can help both sides. Nobody can do all the work alone. Why are there eleven players in football team? Because everyone has a different task. If everyone fulfills their duties and helps each other, success will increase. It should not be forgotten. A chain is only as strong as its weakest link. If we want to increase our success we must help each other.

Es gibt Sprichwörter darüber, wie man sich in jeder Sprache gegenseitig hilft. Wenn ich mich nicht irre, gab es ein Sprichwort auf Englisch "Eine Hand wäscht die andere". Es drückt die Idee aus, dass die gegenseitige Zusammenarbeit beiden Seiten helfen kann. Niemand kann die ganze Arbeit alleine machen. Warum gibt es elf Spieler in der Fußballmannschaft? Weil jeder eine andere Aufgabe hat. Wenn jeder seine Aufgaben erfüllt und sich gegenseitig hilft, steigt der Erfolg. Es sollte nicht vergessen werden. Eine Kette ist nur so stark wie ihr schwächstes Glied. Wenn wir unseren Erfolg steigern wollen, müssen wir uns gegenseitig helfen.

### Q8 What do we mean by HTML and what is new with HTML5?

The marking language, HTML, is the system used in the preparation of web pages. HTML, which is not a programming language, is used to create the websites we use on our computers. Browsers such as Chrome, Firefox and Internet Explorer process HTML codes and convert these codes to web pages. It enables the content such as visual, text and video to be placed on the web page. It ensures that these contents are displayed correctly on the websites. It gives search engines information about websites. The main starting point of HTML5 is the development of the HTML language to support today's modern multimedia tools. HTML5 is the continuation of HTML4 and XHTML. HTML5 aims to meet and support new technologies offered by new modern web browsers.

### Q9 Reasons teamwork is important?

As everybody knows, nobody can handle all the work alone. For example, why are there eleven players in football team? Goalkeeper, midfielder, striker. Because everyone has a different task. If everyone fulfills their duties and helps each other, our success will increase. Also, you cannot brainstorm on your own. Better ideas come up when brainstorming is done with a team. If we want to increase our success as a business, we must help each other. It should not be forgotten. A chain is only as strong as its weakest link. so we have to fulfill our duties on time.

### Q10 What do we mean by HTML attribute?

HTML attributes allow us to provide additional information to HTML elements. They can be added to all HTML elements. They are added to the first tag, the opening tag. Some attributes can be in all HTML elements, but some may be tag-specific only.

#### Q11 How do you handle stress at work?

Three words are important: communication, planning and prioritization. I plan and prioritize my works to be done. I group them into short, medium and long term actions. In this way, the management and stress of the works is reduced. I also prefer to be contact constantly with my colleagues. This communication helps me to fullfil my tasks at work. My concentration and capacity increase further when a work deadline approaches. If necessary, I don't sleep until the morning to finish work. When I was working in defence industry, top managers would always come to inspect the factory. We used to work until mornings. It was hard not to get excited in front of them, but I was able to cope with this stress because everytime I did my work fully and on time. Hereby I took many times certificate of appreciation from them.

### Q12 What is Python?

Python is a high level programming language. Since the syntax is easy and understandable, it can be learned more easily than other programming languages. Its popularity is increasing day by day. It is used in many areas. For example, data science, artificial intelligence, machine learning, automation, networking, web and mobile applications, testing. You can get good salaries due to the wide range of applications. It is supported by a large community. It has thousands of libraries.

## Q13 How do you motivate other people?

When motivating people, I take into account their characters and the work they have been able to achieve before. If I see them having difficulties, I remind them of the things they have accomplished before. For example, if they have difficulty learning a foreign language, I remind them how they can speak their native languages fluently. I also provide them the necessary environment to accomplish their duties.

#### Q14 What is Linux Kernel?

Linux Kernel is a core program of an operating system. The Linux kernel is the lowest level software running on a Linux system. It is responsible for managing hardware, running user programs, and ensuring the security and compatibility of the entire system.

In a Linux system, the kernel is only a small piece of software

but it is an important part that determines how well the system will work and this is really only Linux specific.

The core tasks of a Linux Kernel are:

- Managing input and output transactions
- Process management
- Memory management
- Device management
- File management

#### Q15 What are Scrum ceremonies?

Scrum suggests four ceremonies: the sprint planning meeting, Daily Scrum, sprint review meeting, and sprint retrospective meeting.

The goal of Sprint Planning is to answer the questions "What are we going to work on, and how are we going to do it?" It's also important for the team to have a shared goal and a shared commitment to this goal before beginning their Sprint.

Once we begin a Sprint, we have what we call a Daily Scrum every day. Organized by the Scrum Master, Daily Scrum is typically a 15-minute stand-up meeting to synchronize the work of team members, that is what's done on yesterday, what needs to be done today, identify any impediments.

The goal of Sprint Review Meeting is to get feedback from the product owner and other stakeholders to ensure that the delivered increment met the business need and to revise the Product Backlog based on the feedback.

Retrospectives typically last 90 minutes and are there to help us incorporate continuous improvement into our team culture. This is where the Scrum Team meets to reflect on their previous Sprint and to figure out how to improve as a team by asking – what went well, what did not and what can be improved. It allows the team to focus on its overall performance and identify strategies for continuous improvement.

#### Q16 What are differences LINUX and UNIX?

Linux is just a kernel. All Linux distributions include a graphical interface, GNU tools and various applications (OpenOffice, Firefox etc.). However, UNIX operating systems are considered a complete operating system, and everything in its content comes from a single source or provider.

Linux is just a kernel, and Linux distributions make it an available operating system. But many UNIX operating systems come with all the necessary programs and compilers from A to Z. For example, HP-UX or Solaris comes as a complete package operating system.

Linux is free. You can download Linux for free on the internet and redistribute it under the GNU license. Linux has excellent community support on the internet. However, many UNIX-like operating systems are not free. Some Linux distributions, such as Redhat / Novell, offer additional services such as additional support, consulting, debugging and training for a fee.

Linux is seen as the most user-friendly UNIX-like operating system. Sound card, flash players and other desktop applications can be easily installed. Apple OS X is the most popular UNIX operating system in desktop use.

### Q17 Why do we need DevOps?

DevOps, which is a component of development (Dev) and transactions (Ops), is a collection of people, processes and technologies that constantly come together to deliver value to customers.

What does DevOps mean for teams? DevOps allows development, IT operation, quality engineering and security roles, which were previously considered separate, to coordinate and collaborate to produce better and more reliable products.

In addition to DevOps methods and tools, teams that adopt a DevOps culture gain the ability to respond better to customer needs.

These teams can increase their trust in the applications they create and reach their business goals more quickly.

Adopting the DevOps culture, methods and tools, teams increase their performance and start producing better products faster for greater customer satisfaction.

This increased collaboration and productivity plays a critical role in achieving business goals such as shortening marketing time, keeping up with market and competition, ensuring system continuity and reliability, and improving average recovery time.