

Questions	RAG	Without RAG	pdf
1.what are data leaks	<p>Response: Based on the provided context, data leaks refer to private data from Android apps that "routinely escapes the device, whether intentionally or not." This can occur through various means, including static and dynamic analysis techniques, logcat data, and runtime permissions. The goal of detecting data leaks is to identify and prevent unauthorized access to sensitive user information.</p> <p>Sources: find below</p>	<p>A data leak, also known as a data breach or information disclosure, is an unauthorized release of sensitive or confidential information, such as personal data, financial information, or intellectual property. This can occur when an individual or organization fails to properly protect the security and integrity of their data.</p> <p>Data leaks can happen in various ways, including:</p> <ol style="list-style-type: none"> 1. Malware attacks: Malicious software (malware) can be used to gain unauthorized access to a computer system or network, allowing hackers to steal sensitive information. 2. Phishing attacks: Hackers may use social engineering tactics to trick individuals into revealing sensitive information, such as login credentials or financial data. 3. Unsecured databases: Databases that are not properly secured can be accessed by 	

Questions	RAG	Without RAG	pdf
		<p>unauthorized individuals, leading to the theft of sensitive information.</p> <p>4. Physical theft: Sensitive documents or devices containing confidential information can be stolen from physical locations.</p> <p>5. Insider threats: Malicious insiders, such as employees or contractors, may intentionally release sensitive information for personal gain or other motives.</p> <p>Data leaks can have serious consequences, including:</p> <p>1. Identity theft: Stolen personal data can be used to commit identity theft, resulting in financial losses and damage to reputation.</p> <p>2. Financial fraud: Sensitive financial information can be used to commit fraudulent activities, such as credit card fraud or bank account hacking.</p> <p>3. Loss of intellectual property: Confidential business information, trade secrets, or proprietary knowledge can be stolen and used by competitors.</p>	

Questions	RAG	Without RAG	pdf
		<p>4. Reputation damage: A data leak can lead to reputational damage, loss of customer trust, and financial losses due to decreased business.</p> <p>To prevent data leaks, organizations should:</p> <ol style="list-style-type: none">1. Implement robust security measures, such as firewalls, intrusion detection systems, and encryption technologies.2. Train employees on cybersecurity best practices and the importance of protecting sensitive information.3. Conduct regular vulnerability assessments and penetration testing to identify weaknesses in their systems.4. Develop and implement incident response plans to quickly respond to data breaches.5. Implement data loss prevention (DLP) measures to monitor and control data transmission and storage. <p>In case of a data leak, it's essential to:</p> <ol style="list-style-type: none">1. Act quickly:	

Questions	RAG	Without RAG	pdf
		<p>Respond promptly to contain the breach and minimize damage.</p> <p>2. Notify affected parties: Inform individuals or organizations whose sensitive information has been compromised.</p> <p>3. Conduct an investigation: Determine the cause of the breach and take steps to prevent similar incidents in the future.</p> <p>4. Implement remediation measures: Fix vulnerabilities, update software, and re-secure systems to prevent further breaches.</p> <p>By understanding data leaks and taking proactive measures to prevent them, organizations can protect their sensitive information and maintain customer trust.</p>	
2.where do we download android apps from?	<p>Response: According to the provided context, Android apps can be downloaded from:</p> <ol style="list-style-type: none"> 1. Google Play Store 2. APK files 3. Pre-installed applications installed in the original ROM (ROM stands for Read-Only Memory) of an Android smartphone. 	<p>There are several ways to download Android apps, depending on your device and the type of app you're looking for. Here are some popular options:</p> <p>1. Google Play Store: The Google Play Store (formerly Android Market) is the official app store for Android devices. You can find</p>	Android apps are either installed from the android market, from apk file, or are pre-installed in the ROM installed by the manufacturer.

Questions	RAG	Without RAG	pdf
	<p>Note that the context does not mention downloading apps through any other means or platforms, such as Apple App Store or F-Droid.</p> <p>Sources:</p>	<p>millions of apps, including games, productivity tools, social media, and more. To download from the Play Store:</p> <p><i>Open the Google Play Store on your device.</i></p> <p>Search for the app you want to download.</p> <p><i>Tap "Install" or "Update" to download and install the app.</i></p> <p>2. Alternative App Stores: While not as popular as the Play Store, there are other app stores available for Android devices:</p> <p>Amazon Appstore: Offers a curated selection of apps, with some exclusive titles.</p> <p><i>F-Droid: A free and open-source app store that focuses on non-commercial, free software.</i></p> <p>APKMirror: A third-party app store that offers a wide range of APK files (more on this later).</p> <p>3. APK Files: Some apps may not be available in the Play Store or other official stores due to various reasons. In such cases, you can search for and download APK files from:</p>	

Questions	RAG	Without RAG	pdf
		<p><i>APKMirror</i> (mentioned earlier)</p> <p>APKPure: A popular site that offers a wide range of APK files.</p> <p><i>ApkFiles.com:</i> Another website that provides APK downloads.</p> <p>4. Developer Websites: Some developers may offer their apps directly on their websites, bypassing traditional app stores. You can search for the app developer's website and look for the "Download" or "Install" button.</p> <p>Important Note: When downloading apps from sources other than the Play Store, make sure to:</p> <p>Only download APK files from trusted sources.</p> <p><i>Check the app's permissions and reviews before installing.</i></p> <p>Be cautious of fake or malicious apps that may contain malware or viruses.</p> <p>Remember to always prioritize your device's security by only</p>	

Questions	RAG	Without RAG	pdf
		downloading apps from reputable sources.	
3.What are the two main approaches used by anonymous communication (AC) protocols to provide stronger anonymity guarantees?	<p>Response: According to the given context, there are no explicit mentions of two main approaches used by AC protocols to provide stronger anonymity guarantees. However, it is mentioned that some efforts have been made to propose hybrid approaches [19]-[24] that try to provide anonymity by simultaneously introducing latency and bandwidth overhead. It seems that these hybrid approaches aim to balance system parameters to ensure strong anonymity while preserving practical performance.</p> <p>Sources:</p>	<p>The two main approaches used by Anonymous Communication (AC) protocols to provide stronger anonymity guarantees are:</p> <ol style="list-style-type: none"> 1. Mixing: This approach involves sending messages through a series of intermediate nodes, known as Mixes or Rendezvous Points (RPs). Each Mix randomly shuffles the messages it receives from previous nodes with other messages it has received, making it difficult for an attacker to determine the original sender of the message. The messages are then forwarded to the next Mix in the chain, and so on. This process is repeated multiple times, increasing the difficulty of tracing the message back to its original sender. 2. Distributed Hash Tables (DHTs) with Distributed Caches: In this approach, nodes in the network store and forward messages anonymously by using a distributed hash table (DHT). Each node has a 	<p>Anonymous Trilemma</p> <p>In the anonymity literature, several AC protocols were able to overcome this security barrier to provide a stronger anonymity guarantee (cryptographic indistinguishability-based anonymity [12], [13]) by either increasing the latency overhead or the bandwidth overhead. In particular, high-latency approaches (such as threshold mix networks [14]) can ensure strong anonymity by introducing significant communication delays for users' messages, while high-bandwidth approaches (such as Dining Cryptographer network [15] and its extensions [16]–[18]) can provide strong anonymity by adding copious noise (or dummy) messages.</p>

Questions	RAG	Without RAG	pdf
		<p>unique identifier and a cache that stores messages associated with that identifier. When a node receives a message, it checks its cache to see if it has already received the same message before. If not, it forwards the message to other nodes in the network. This approach provides stronger anonymity guarantees by making it difficult for an attacker to determine which node was the original sender of the message.</p> <p>Both approaches are designed to provide strong anonymity guarantees by hiding the identity of the message's origin and making it difficult for attackers to trace messages back to their senders.</p>	
4.for what reasons are understanding Apple's mobile ecosystem is essential?	<p>Response: According to the text, understanding Apple's mobile ecosystem is essential because:</p> <p>i) Apple heavily promotes its platform as privacy-oriented using phrases such as "Privacy. That's Apple" [5], which may lead iOS users to be less concerned about the privacy implications of</p>	<p>Understanding Apple's mobile ecosystem is essential for several reasons:</p> <p>1. Dominant Market Share: Apple has a significant market share in the smartphone industry, with over 50% of the global market share as of 2022. As such, it's crucial to comprehend how their</p>	<p>Apple privacy of default apps</p> <p>i) Apple heavily promotes its platform as privacy-oriented using phrases such as "Privacy. That's Apple". As a result, iOS users may be less concerned about the privacy implications of default apps than Android users. ii) Due to the closed nature o</p>

Questions	RAG	Without RAG	pdf
	<p>default apps than Android users.</p> <p>ii) Due to the closed nature of the ecosystem, verifying data handling practices can be challenging.</p> <p>iii) In general, Apple's ecosystem is severely understudied in relevant literature, yet it is very popular. Sources:</p>	<p>ecosystem functions and how it affects users.</p> <p>2. Integration and Interoperability: Apple devices are designed to work seamlessly together, creating an integrated experience across products like iPhones, iPads, MacBooks, and Apple Watches. Understanding this integration is vital for developers and businesses seeking to create compatible solutions.</p> <p>3. Closed System: Apple's mobile ecosystem is a closed system, meaning that third-party apps must comply with strict guidelines and policies to ensure quality and security. Familiarity with these requirements can help developers and businesses create compliant products and services.</p> <p>4. Security and Compliance: Apple's focus on security and compliance makes it essential for organizations and individuals to understand how their mobile ecosystem handles data protection, encryption, and authentication.</p> <p>5. Software Updates</p>	<p>the ecosystem, verifying data handling practices can be challenging. Finally</p> <p>iii) in general, Apple's ecosystem is severely understudied in relevant literature.</p>

Questions	RAG	Without RAG	pdf
		<p>and Maintenance: Apple regularly releases software updates for its devices, which can impact compatibility with other products and services. Knowing how these updates work can help developers and businesses ensure their solutions remain compatible and up-to-date.</p> <p>6. App Store Presence: The App Store is a crucial part of Apple's mobile ecosystem, offering over 2 million apps to users. Understanding the app development process, review guidelines, and marketing strategies for the App Store can help developers and businesses reach their target audience.</p> <p>7. Enterprise Mobility Management (EMM): As more organizations adopt bring-your-own-device (BYOD) policies or develop mobile-first strategies, understanding Apple's EMM capabilities is essential for managing devices, data, and applications within an organization.</p> <p>8. Integration with Other Apple Services: Apple's mobile</p>	

Questions	RAG	Without RAG	pdf
		<p>ecosystem is deeply integrated with other services like iCloud, iMessage, FaceTime, and Siri. Understanding how these services interact can help individuals and businesses optimize their experience across multiple devices.</p> <p>9. Hardware and Software Ecosystem Interdependencies: Apple's hardware and software are tightly coupled, which means that changes in one area can impact the other. Knowing how these interdependencies work can help developers and businesses create solutions that seamlessly integrate with Apple products.</p> <p>10. Innovative Features and Technologies: Apple is known for introducing innovative features and technologies, such as ARKit, Core ML, and Face ID. Understanding these innovations can help developers and businesses stay ahead of the curve and capitalize on new opportunities.</p> <p>By understanding Apple's mobile</p>	

Questions	RAG	Without RAG	pdf
		<p>ecosystem, you'll be better equipped to:</p> <p><i>Develop apps that integrate with Apple devices</i></p> <p>Create solutions that take advantage of Apple's innovative features</p> <p><i>Manage devices and data within an organization</i></p> <p>Optimize your experience across multiple Apple devices</p> <p><i>Comply with Apple's policies and guidelines</i></p> <p>Stay up-to-date with software updates and maintenance</p> <p>Overall, having a deep understanding of Apple's mobile ecosystem is essential for anyone looking to develop, market, or manage products and services that interact with Apple devices.</p>	
5.what is the standard model for simple cell and for complex cell?	<p>Response: According to the provided context, the standard models are:</p> <p>Standard Simple-Cell Model</p> <p>The response of a simple cell is simply a linear filter having the shape of a wavelet. The filter (weight vector w) is strongly excited by a bar or grating of the correct</p>	<p>In cellular biology, a "simple cell" refers to prokaryotic cells, such as bacteria, while a "complex cell" refers to eukaryotic cells, which are more advanced and have a true nucleus.</p> <p>Simple Cell (Prokaryotic):</p> <p>The standard model for</p>	<p>6-CNS1-VisualPerception-LaurenzWiskott-LectureNotes</p> <p>The standard model of a simple cell is simply a linear filter having the shape of a wavelet. The standard model for a complex cell is the so-called quadrature filter pair model</p>

Questions	RAG	Without RAG	pdf
	<p>frequency (in case of a grating), orientation, and exact position.</p> <p>Standard Complex Cell Model</p> <p>The standard model for a complex cell is the so-called quadrature filter pair model. The response of two standard simple-cell models are squared and added. The filters of the two simple cells form a so-called quadrature filter pair, in this case two wavelets that differ only by a slight shift of the stripes by half a stripe width. Sources:</p>	<p>a simple cell is:</p> <ol style="list-style-type: none"> 1. Cell membrane: A thin layer of lipids and proteins that surrounds the cell. 2. Cytoplasm: A gel-like substance where metabolic processes take place. 3. Nucleoid: A region containing genetic material (DNA) that is not enclosed by a nuclear envelope. <p>Complex Cell (Eukaryotic):</p> <p>The standard model for a complex cell is:</p> <ol style="list-style-type: none"> 1. Cell membrane: A thin layer of lipids and proteins that surrounds the cell. 2. Cytoplasm: A gel-like substance where metabolic processes take place. 3. Nucleus: A membrane-bound organelle containing genetic material (DNA). 4. Mitochondria: Organelles responsible for energy production through cellular respiration. 5. Endoplasmic reticulum (ER): A network of membranous tubules and cisternae involved in protein synthesis, 	

Questions	RAG	Without RAG	pdf
		<p>folding, and transport.</p> <p>6. Ribosomes: Small organelles found throughout the cytoplasm where protein synthesis occurs.</p> <p>7. Lysosomes: Membrane-bound sacs containing digestive enzymes that break down and recycle cellular waste.</p> <p>These are the basic components of a simple cell (prokaryote) and a complex cell (eukaryote). Keep in mind that there may be variations depending on the specific type of cell or organism.</p>	
6. What improvements have cellphones and associated apps brought to society and what serious concerns have arisen with the use of cellphones and apps?	<p>Response: Based on the provided context, here are some improvements that cellphones and associated apps have brought to society:</p> <p><i>Simplified user interfaces for faster device adoption</i></p> <p>Pre-installed mobile applications (default apps) that provide various features such as messaging, video calls, location services, and fingerprint recognition</p> <p><i>Ability to share devices with family members or others</i></p> <p><i>However, the context</i></p>	<p>Cellphones and associated apps have brought numerous benefits and improvements to society, but they have also raised several serious concerns. Here are some examples:</p> <p>Improvements:</p> <p>1. Global connectivity: Cellphones have made it possible for people to stay connected with friends, family, and colleagues across the globe.</p> <p>2. Information access: With the internet at their fingertips, people</p>	<p>Examining the Integrity of Apples Privacy Labels:</p> <p>While cellphones and associated apps have significantly improved communication and convenience, they have also given rise to serious concerns regarding the security of personal data.</p>

Questions	RAG	Without RAG	pdf
	<p><i>also highlights some serious concerns that have arisen with the use of cellphones and apps:</i></p> <p>Lack of understanding among users about installation-time settings and their privacy implications</p> <p><i>Potential ongoing ramifications for user privacy during the entire life-cycle of the device</i></p> <p>Concerns around default apps logging user interactions and uploading data to servers, revealing personal habits and behaviors over time</p> <p><i>Issues with default app descriptions and settings not changing despite updates</i></p> <p>Distrust and tension may arise from various social contexts and norms in which technologies operate</p> <p>Sources:</p>	<p>can access vast amounts of information, learn new things, and make informed decisions.</p> <p>3. Convenience: Cellphones have simplified many aspects of daily life, such as banking, shopping, and communication.</p> <p>4. Healthcare: Mobile health (mHealth) apps have enabled remote healthcare services, telemedicine, and patient monitoring.</p> <p>5. Education: Educational apps and online resources have made learning more accessible, engaging, and effective.</p> <p>6. Business: Cellphones have transformed the way businesses operate, with mobile commerce, payment systems, and productivity tools.</p> <p>Concerns:</p> <p>1. Addiction: Excessive phone use can lead to addiction, social isolation, and decreased attention span.</p> <p>2. Mental health: The constant stream of notifications, social media pressure, and FOMO (fear of missing</p>	

Questions	RAG	Without RAG	pdf
		<p>out) can contribute to anxiety, depression, and stress.</p> <p>3. Physical health: Prolonged screen time has been linked to eye strain, headaches, and poor posture.</p> <p>4. Privacy and security: The collection and misuse of personal data, cyberbullying, and online harassment are serious concerns.</p> <p>5. Social skills: Over-reliance on cellphones can lead to poor social skills, such as difficulty maintaining face-to-face conversations.</p> <p>6. Sleep disruption: Exposure to blue light from screens before bed can interfere with sleep patterns and overall well-being.</p> <p>7. Distractions: Cellphones can be significant distractions in settings like classrooms, meetings, or while driving, leading to decreased productivity and increased risk of accidents.</p> <p>8. Social comparison: Social media apps can fuel unrealistic expectations and promote unhealthy comparisons, contributing to low self-esteem and body dissatisfaction.</p>	

Questions	RAG	Without RAG	pdf
		<p>9. Online harassment: The anonymity of the internet can lead to bullying, cyberstalking, and other forms of online abuse.</p> <p>10. Addiction to notifications: Constantly checking phones for notifications can create a sense of constant stress and anxiety.</p> <p>To mitigate these concerns, it's essential to establish healthy phone use habits, such as:</p> <p><i>Setting boundaries around phone use</i> Practicing digital etiquette and responsibility</p> <p><i>Monitoring screen time and setting limits</i> Using apps that promote mindfulness, meditation, or relaxation</p> <p><i>Engaging in physical activities and outdoor pursuits</i> Prioritizing face-to-face interactions and social connections</p> <p>By acknowledging both the benefits and concerns of cellphone use, we can strive to create a more balanced and responsible</p>	

Questions	RAG	Without RAG	pdf
		relationship with our devices.	
7. definieren Sie die forensische Wissenschaft.	<p>Response: Based on the provided context, the forensic science is defined as:</p> <p>„Die forensische Wissenschaft (häufig abgekürzt als Forensik) ist [...] die Anwendung wissenschaftlicher Methoden auf Fragen des Rechtssystems, etwa zur Untersuchung und Verfolgung von Straftaten“</p> <p>(Translation: "The forensic science (often abbreviated as Forensik) is... the application of scientific methods to questions in the legal system, such as investigation and prosecution of crimes")</p> <p>Source: Dewald and Freiling (2015)</p> <p>Sources:</p>	<p>Die Forensische Wissenschaft, auch Forensic Science genannt, ist eine interdisziplinäre Wissenschaftsrichtung, die sich mit der Anwendung wissenschaftlicher Methoden und Verfahren auf den Bereich der Kriminalistik und Justiz beschäftigt. Ihr Zweck ist es, Beweise zu sammeln, zu analysieren und auszuwerten, um Straftaten aufzuklären und Täter zu identifizieren oder zu überführen.</p> <p>Die Forensische Wissenschaft umfasst eine Vielzahl von Disziplinen, darunter:</p> <ol style="list-style-type: none"> 1. Analytische Chemie: Die Analyse von Substanzen wie Drogen, Giftstoffen, DNA-Präparaten und anderen Materialien. 2. DNA-Analytik: Die Identifizierung von DNA-Materialien anhand von Fingerabdrücken, Haaren, Hautschuppen oder anderen Gewebestücken. 3. Forensische 	<p>„Die forensische Wissenschaft (häufig abgekürzt als Forensik) ist [...] die Anwendung wissenschaftlicher Methoden auf Fragen des Rechtssystems, etwa zur Untersuchung und Verfolgung von Straftaten.“</p>

Questions	RAG	Without RAG	pdf
		<p>Anthropologie: Die Analyse menschlicher Überreste zur Ermittlung von Todesursachen, Alter und Geschlecht des Verstorbenen.</p> <p>4. Forensische Psychologie: Die Untersuchung von Morderfahrungen, -motiven und -verhaltensweisen.</p> <p>5. Forensische Medizin: Die Analyse von medizinischen Spuren wie Blutgruppen, Gewebe- und Organtransplantationen.</p> <p>6. Computerforensik: Die Aufklärung von Cyberkriminalität durch die Analyse von Computersystemen und Daten.</p> <p>7. Forensische Linguistik: Die Analyse von Texten, insbesondere bei der Aufklärung von Verbrechen wie Betrug oder Fälschungen.</p> <p>Die Forensische Wissenschaft verwendet eine Vielzahl von Methoden und Techniken, um Beweise zu sammeln und auszuwerten. Dazu gehören unter anderem:</p> <p>1. Sammlung von Spurenmaterialien (z.B. Fingerabdrücken,</p>	

Questions	RAG	Without RAG	pdf
		<p>Haaren, Hautschuppen)</p> <p>2. Analyse von DNA-Proben</p> <p>3. Auswertung von Computerdaten und -systemen</p> <p>4. Rekonstruktion von Ereignissen durch die Analyse von Zeugenaussagen und Umfeldinformationen</p> <p>5. Überprüfung von Alibis und Aussagen</p> <p>Die Forensische Wissenschaft ist wichtig für die Aufklärung von Straftaten, da sie es ermöglicht, Beweise zu sammeln und auszuwerten, um Täter zu identifizieren oder zu überführen. Dies kann auch dazu beitragen, dass Straftäter belangt werden und die Opfer von Verbrechen Schutz vor weiteren Übergriffen erfahren können.</p>	
8.was enthält Dateisystemsdaten?	<p>Response: Based on the provided context, Dateisystemsdaten contain:</p> <ul style="list-style-type: none"> • Dateiname (file name) • Dateigröße (file size) • Startadresse des Inhalts (start address of contents) <p>These are mentioned in section 34.1 "DATEISYSTEMANALYSE FAT— KONZEPT" under the heading</p>	<p>Dateisystem-Daten (File System Data) sind die Struktur und Inhalte, die ein Dateisystem auf einem Computer-Speichermedium wie einer Festplatte oder einem USB-Stick enthält. Hier sind einige Beispiele für die Art von Daten, die in einem Dateisystem enthalten sein können:</p>	<ul style="list-style-type: none"> - Allgemeine Daten des Dateisystems - Definiert die Eindeutigkeit des Dateisystems - Informationen darüber, wo weitere (wichtige) Daten abgelegt sind. - Version - Hinweise zur Erstellung. - Zeitstempel - Bezeichnung

Questions	RAG	Without RAG	pdf
	<p>"DIRECTORY ENTRIES".</p> <p>Sources:</p>	<p>1. Inode-Tabellen: Jedes Dateisystem hat eine Inode-Tabelle, die Informationen über Dateien und Verzeichnisse enthält, wie z.B. Name, Größe, Modus (Lesen/Schreiben) und Standort auf dem Speichermedium.</p> <p>2. FAT-Tablet: Wenn das Dateisystem ein FAT-(File Allocation Table)-System ist (wie z.B. FAT16 oder FAT32), enthält die FAT-Tabelle eine Liste von free Blocks (leeren Blöcken) und den Anfangspunkt der Dateien auf dem Speichermedium.</p> <p>3. Inode-Blöcke: Jedes Inode hat einen eigenen Block im Dateisystem, in dem weitere Informationen wie z.B. das Zeitstempel für die letzten Änderungen oder den Eigentümer des Dateisystems gespeichert sind.</p> <p>4. File-Namen und -Verzeichnisse: Das Dateisystem enthält eine Liste von Dateinamen und Verzeichnissen, die in einem bestimmten Ordner liegen. Diese Informationen werden im Inode-Block gespeichert.</p>	

Questions	RAG	Without RAG	pdf
		<p>5. Datei-Inhalte: Die tatsächlichen Inhalte der Dateien selbst sind nicht Teil des Dateisystems, sondern werden auf dem Speichermedium abgelegt.</p> <p>Das Dateisystem ist eine wichtige Komponente eines Computers, da es die Verbindung zwischen den Dateien und den Anwendungen herstellt. Es ermöglicht es, Dateien zu erstellen, zu lesen, zu ändern oder zu löschen.</p>	
9. was macht ein Dateisystem bei defekten Sektoren?	<p>Response: According to the given context, if some sectors are defective, the dateisystem will:</p> <p><i>mark these defective dateneinheiten as such, in order to prevent further allocation of data to them</i></p> <p>not necessarily need to intervene, since free sectors can be handled by the hard drive itself, and non-functional units can be replaced by new ones.</p> <p>This is mentioned in section 282.3 METHODIK DER DATEISYSTEMANALYSE— INHALTSDATEN:</p>	<p>A question that gets to the heart of file system behavior when dealing with defective sectors!</p> <p>When a hard drive or solid-state drive (SSD) has defective sectors, it means that some areas on the storage media are no longer readable or writable. This can happen due to various reasons such as physical damage, wear and tear, or manufacturing defects.</p> <p>In this scenario, a file system plays a crucial role in handling these defective sectors. Here's what happens:</p> <p>1. Detection: The</p>	<p>- Dateisysteme können defekte Dateneinheiten markieren, um eine weitere Allokation zu verhindern</p> <p>- In Normalfall werden freie Sektoren durch die Festplatte selbst vorgehalten, die nicht mehr nutzbare Einheiten ersetzen können, so dass kein Eingreifen des Dateisystems notwendig ist</p> <p>- Das Hinzufügen einer funktionierenden Dateneinheit zu den defekten Dateneinheiten kann genutzt werden, um Daten zu verstecken</p>

Questions	RAG	Without RAG	pdf
	<p>DEFEKTE SEKTOREN.</p> <p>Sources:</p>	<p>operating system or the file system (e.g., NTFS, HFS+, ext4) detects the defective sector(s) when reading or writing data to the storage media.</p> <p>2. Error correction: If the error is minor and correctable, the file system may attempt to recover the data by performing error correction mechanisms such as ECC (Error-Correcting Code) or checksums. If successful, the corrected data is returned to the application.</p> <p>3. Sector sparing: If the sector is severely damaged or uncorrectable, the file system may allocate a spare sector from a reserved pool of sectors to replace the defective one. This process is known as sector sparing.</p> <p>4. Data recovery: The file system may attempt to recover data from the defective sector by reading adjacent sectors and reconstructing the original data. This process is often done using algorithms like RAID (Redundant Array of Independent Disks) or checksum-based</p>	

Questions	RAG	Without RAG	pdf
		<p>recovery methods.</p> <p>5. Sector remapping: In some cases, the file system might remap the defective sector(s) to a new location on the storage media, effectively bypassing the faulty sectors. This can be done by moving the contents of the defective sector to a spare area and updating the file system's metadata accordingly.</p> <p>The specific behavior of a file system when dealing with defective sectors depends on various factors, such as:</p> <p><i>The type of file system (e.g., NTFS, HFS+, ext4)</i> The storage media (hard drive, SSD, flash storage) <i>The level of error correction and redundancy implemented</i> The operating system's handling of disk errors</p> <p>In general, modern file systems are designed to handle defective sectors in a way that minimizes data loss and ensures continued operation. However, if the number of defective sectors</p>	

Questions	RAG	Without RAG	pdf
		becomes too high or the damage is extensive, it may be necessary to replace the storage media or perform more advanced recovery procedures.	
10. wie werden Daten wiederhergestellt mit Hilfe von Metadaten?	<p>Response: Basierend auf dem vorgegebenen Kontext wird eine Datei wiederhergestellt mit Hilfe von Metadaten durch das Verfahren "Datei Carving" (DATA Carving). Dieses Verfahren umfasst die Suche nach Dateisignaturen (Anfang und/oder Ende einer Datei) in den nicht-allokierten Bereichen eines Dateisystems. Das Ziel ist es, Dateien ohne dazugehörige Metadaten wiederherzustellen.</p> <p>Sources:</p>	<p>The art of data restoration with the help of metadata!</p> <p>Metadata is "data that provides information about other data." In the context of data restoration, metadata can be used to identify and reconstruct lost or corrupted data. Here are some ways metadata can help:</p> <ol style="list-style-type: none"> File system recovery: Metadata stored on a file system, such as the allocation table (AT) or inode tables, can be used to recover files from a damaged or deleted directory. Data deduplication: By analyzing metadata, you can identify duplicate data blocks and remove redundant copies, reducing storage requirements and improving data availability. Data compression: Metadata can help optimize data compression by 	<ul style="list-style-type: none"> - Metadaten beinhalten die Position der genutzter Speichereinheiten - Wenn eine Datei gelöscht wird, kann ein Dateisystem trotzdem noch Positionsinformationen bereithalten - Falls vorhanden, kann eine Interpretation der vorhandenen Metadaten direkt zum Dateiinhalt führen - Falls keine Metadaten mehr vorhanden sind: Wiederherstellung auf Anwendungsebene

Questions	RAG	Without RAG	pdf
		<p>identifying patterns and structures in the data, allowing for more efficient compression ratios.</p> <p>4. Data integrity checking: Metadata can be used to validate the integrity of stored data by comparing checksums or hashes with expected values.</p> <p>5. Query optimization: By analyzing metadata, database query optimizers can determine the most effective execution plan, reducing query times and improving performance.</p> <p>To restore data using metadata, you typically need to:</p> <p>1. Analyze the metadata: Examine the metadata to identify relevant information about the lost or corrupted data, such as file names, sizes, timestamps, or relationships between data blocks.</p> <p>2. Identify the data structure: Determine the underlying structure of the data, including the format and layout of individual files or databases.</p> <p>3. Reconstruct the data: Use the analyzed</p>	

Questions	RAG	Without RAG	pdf
		<p>metadata to recreate the original data, possibly by:</p> <ul style="list-style-type: none"><i>Reassembling fragmented files</i>Recovering deleted or corrupted records* Restoring backups or snapshots <p>4. Verify the restored data: Check the integrity and accuracy of the restored data using validation techniques like checksums, hashes, or data comparison.</p> <p>Some common metadata formats used for data restoration include:</p> <ol style="list-style-type: none">1. File system metadata (e.g., FAT, NTFS, HFS+): Provides information about file locations, sizes, and timestamps.2. Database metadata (e.g., database schema, table definitions): Helps reconstruct database structures and relationships.3. Log files: Contains event logs, error messages, or audit trails that can aid in data restoration.4. Backup metadata: Stored with backups, this metadata describes the backup contents,	

Questions	RAG	Without RAG	pdf
		<p>including file lists and timestamps.</p> <p>By leveraging metadata, you can often recover data from unexpected situations like disk failures, system crashes, or human errors.</p>	
11.what are the properties of planning problems?	<p>Response: According to the text, planning problems have the following properties:</p> <ul style="list-style-type: none"> • The problem is solved by taking a sequence of actions, or decisions. Time is discrete, i.e., there is a first decision, a second decision, and so on. • A solution of the problem is a sequence of actions (bus/train/airplane connections, or card moves). The sequence starts at the initial state and ends at the goal state. • There is a way to tell which sequence is best, i.e., comparing travel time or the number of card moves. <p>Sources:</p>	<p>Planning problems, also known as planning tasks or planning situations, have certain characteristics that distinguish them from other types of problems. The following are some common properties of planning problems:</p> <ol style="list-style-type: none"> 1. Uncertainty: Planning problems often involve uncertainty about the future, including unknown events, outcomes, and consequences. 2. Complexity: Planning problems tend to be complex, involving multiple factors, variables, and stakeholders. 3. Interdependence: Planning problems frequently involve interdependent components, where one part affects or is affected by another. 4. Multiple goals: Planning problems 	<ul style="list-style-type: none"> - The problem is solved by taking a sequence of actions, or decisions. Time is discrete, i.e., there is a first decision, a second decision, and so on. - The consequences of each action are known or can be computed on demand. We say that a "forward model" is available. - There is an initial state (e.g., you are in Bochum now), and a goal state (you want to be at Sorbonne University on Thursday at 4pm). - Each action brings you from one state to another (e.g., taking a train to Cologne may result in the new state "in Cologne on Thursday at 10am"). - A solution of the problem is a sequence of actions (bus/train/airplane connections, or card moves). - The sequence starts at the initial state and

Questions	RAG	Without RAG	pdf
		<p>typically have multiple goals, objectives, or criteria that need to be considered simultaneously.</p> <p>5. Constraints: Planning problems often involve constraints, such as limitations on resources (time, money, people), regulatory requirements, or physical laws.</p> <p>6. Risk and uncertainty: Planning problems can involve risk and uncertainty, which requires consideration of potential outcomes, consequences, and mitigation strategies.</p> <p>7. Dynamic environment: Planning problems frequently occur in dynamic environments, where conditions change over time, and decisions need to be made in response to these changes.</p> <p>8. Long-term focus: Planning problems often require a long-term perspective, as the consequences of decisions may not be immediately apparent.</p> <p>9. Stakeholders with competing interests: Planning problems can involve multiple stakeholders with</p>	<p>ends at the goal state. There is a way to tell which sequence is best, i.e., comparing travel time or the number of card moves</p>

Questions	RAG	Without RAG	pdf
		<p>competing interests, values, or priorities.</p> <p>10. Limited information: Planning problems typically involve incomplete or uncertain information, which requires decision-makers to make informed judgments and estimates.</p> <p>11. Tension between exploration and exploitation: Planning problems often require balancing the need for exploration (trying new approaches) and exploitation (improving existing processes).</p> <p>12. Non-linear relationships: Planning problems frequently involve non-linear relationships between variables, making it challenging to predict outcomes based solely on past experiences or trends.</p> <p>13. High stakes: Planning problems can have high stakes, with significant consequences resulting from decisions made or not made.</p> <p>14. Time pressure: Planning problems often require decisions to be made within a certain timeframe, adding pressure and urgency to the planning process.</p>	

Questions	RAG	Without RAG	pdf
		<p>15. Adaptability: Planning problems frequently demand adaptability, as plans may need to be adjusted in response to changing circumstances.</p> <p>These properties of planning problems can make them more challenging than other types of problems, requiring planners to think critically, creatively, and strategically to develop effective solutions.</p>	
12. what is the goal of planning?	<p>Response: According to the context, the goal of planning in AI is "thinking something through" using a mental forward model of a process or environment. In other words, planning refers to the process of mentally simulating a sequence of actions to achieve a desired outcome, before actually taking those actions.</p> <p>Sources:</p>	<p>In Artificial Intelligence (AI), the primary goal of planning is to generate a sequence of actions that can achieve a specific goal or set of goals. Planning involves reasoning about the current state of the world, identifying relevant objects and agents, and determining the most effective way to achieve a desired outcome.</p> <p>More formally, the goal of planning in AI is to:</p> <p>1. Represent: Represent the problem domain as a formal model, typically using a graph-based or logical representation.</p>	<p>Find a sequence of actions a_1, a_2, \dots, a_n starting at state $s_1 = s_{init}$ and transitioning according to $s_{t+1} = T(s_t, a_t)$ that brings the agent to the goal state $s_{n+1} \in G$.</p> <p>Find such a sequence of actions causing minimal cost</p>

Questions	RAG	Without RAG	pdf
		<p>2. Plan: Generate a plan that starts from an initial state and terminates at a goal state, considering constraints, obstacles, and uncertainties.</p> <p>3. Optimize: Optimize the plan by minimizing costs, maximizing benefits, or satisfying additional criteria (e.g., minimizing time, energy, or resources).</p> <p>4. Verify: Verify the feasibility of the plan, ensuring that it is executable and will achieve the desired outcome.</p> <p>Planning in AI has numerous applications across various domains, including:</p> <p>1. Robotics: Planning for motion planning, manipulation, and control.</p> <p>2. Autonomous systems: Planning for self-driving vehicles, drones, or other autonomous agents.</p> <p>3. Supply chain management: Planning for logistics, inventory management, and production scheduling.</p> <p>4. Finance: Planning for investment portfolios, risk management, and financial forecasting.</p> <p>5. Healthcare: Planning</p>	

Questions	RAG	Without RAG	pdf
		<p>for patient care, treatment planning, and resource allocation.</p> <p>To achieve these goals, AI planners use various algorithms and techniques, such as:</p> <ol style="list-style-type: none"> 1. Classical planning: Using logic-based methods to find a plan that satisfies a set of constraints. 2. Planning under uncertainty: Handling uncertain or probabilistic information in the planning process. 3. Hybrid planning: Combining classical and non-classical (e.g., reinforcement learning) approaches for more flexible planning. 4. Anytime planning: Allowing plans to be generated incrementally, with the ability to interrupt and restart the planning process. <p>By solving complex planning problems, AI can help humans make better decisions, optimize resources, and improve overall efficiency in various domains.</p>	
13. what are the fundamental	Response: According to the provided context, there are three	In machine learning, there are several fundamental paradigms	supervised learning learning a function from labeled data

Questions	RAG	Without RAG	pdf
paradigms in machine learning?	<p>fundamental paradigms in machine learning:</p> <ol style="list-style-type: none"> 1. Supervised Learning: learning a function from labeled data 2. Unsupervised Learning: extracting statistical regularities from unlabeled data 3. Reinforcement Learning: learning to take a sequence of actions to maximize reward <p>Sources:</p>	<p>that guide the development of algorithms and models. These paradigms shape how we approach problems, design solutions, and evaluate performance. Here are some of the most important ones:</p> <ol style="list-style-type: none"> 1. Supervised Learning: This paradigm involves training a model on labeled data (inputs with corresponding outputs) to make predictions or classify new, unseen data. The goal is to minimize the error between predicted and actual outputs. 2. Unsupervised Learning: In this setting, there are no labels or outputs. The goal is to discover patterns, relationships, or structure in the data without prior knowledge of the output variables. Examples include clustering, dimensionality reduction (e.g., PCA), and density estimation. 3. Semi-supervised Learning: This paradigm combines elements of supervised and unsupervised learning. A portion of 	<p>unsupervised learning extracting statistical regularities from unlabeled data reinforcement learning learning to take a sequence of actions to maximize reward</p>

Questions	RAG	Without RAG	pdf
		<p>the data is labeled, while the rest is unlabeled. The goal is to leverage both types of data to improve model performance or generalization.</p> <p>4. Reinforcement Learning: In this setting, an agent interacts with an environment to learn a policy that maximizes a reward signal. The goal is to optimize decision-making by balancing exploration-exploitation trade-offs.</p> <p>5. Generative Models: These models aim to generate new data samples that resemble the training data's distribution. Generative models can be used for data augmentation, anomaly detection, or generating novel data.</p> <p>6. Gradient-Based Optimization: This paradigm relies on iterative optimization techniques (e.g., gradient descent) to find the best parameters of a model that minimize a loss function.</p> <p>7. Non-Linear Modeling: Non-linear relationships between inputs and outputs are common in many real-world problems. Techniques like neural</p>	

Questions	RAG	Without RAG	pdf
		<p>networks, decision trees, and support vector machines can effectively capture these non-linearities.</p> <p>8. Bayesian Learning: This paradigm incorporates Bayesian inference to learn about model parameters, uncertainty, or probabilistic representations of data.</p> <p>9. Kernel Methods: Kernel methods, such as Support Vector Machines (SVMs) and kernel principal component analysis (KPCA), transform the input space into a higher-dimensional feature space where linear models can be applied.</p> <p>10. Deep Learning: This paradigm focuses on neural networks with multiple layers, which are particularly effective for modeling complex patterns in data, such as images, speech, or text.</p> <p>11. Transfer Learning: This paradigm involves using pre-trained models and fine-tuning them on a target task to leverage knowledge from related domains or tasks.</p> <p>12. Meta-Learning: This paradigm enables</p>	

Questions	RAG	Without RAG	pdf
		<p>models to learn how to learn from few examples by meta-learning algorithms that optimize model updates for subsequent tasks.</p> <p>These fundamental paradigms have led to significant advancements in machine learning, enabling the development of various applications and driving innovation in fields like computer vision, natural language processing, and robotics.</p>	
14. describe how underfitting and overfitting happens in machine learning?	<p>Response: According to the provided context, underfitting occurs when a model is not able to describe the training data very well (Fig. 5). This means that the model is too simple or has too few parameters to capture the underlying pattern or relationship in the data.</p> <p>On the other hand, overfitting happens when a model becomes too complex and starts capturing the noise in the training data instead of the underlying signal. As a result, the model performs well on the training data but fails to generalize well to new,</p>	<p>The perils of fitting!</p> <p>In machine learning, underfitting (also known as insufficient modeling or lack of capacity) occurs when a model is too simple to capture the underlying patterns in the data. As a result, it fails to learn from the training data and performs poorly on both training and test sets.</p> <p>Here are some common scenarios that can lead to underfitting:</p> <p>1. Too few features: If you have only a few features (e.g., inputs) compared to the</p>	Underfitting is when the model is not able to describe the data very well. Overfitting happens when the fit is too good and starts capturing the noise

Questions	RAG	Without RAG	pdf
	<p>unseen data (Fig. 6). The example given is that of a cubic polynomial function fitting the training data perfectly, but failing to generalize to new data which is better captured by a linear fit.</p> <p>In summary, underfitting occurs when a model is too simple and cannot capture the underlying pattern in the data, while overfitting occurs when a model becomes too complex and starts capturing noise instead of signal.</p> <p>Sources:</p>	<p>number of samples in your dataset, your model might not be able to capture the relationships between them.</p> <p>2. Simple models: Using simple models like decision trees or linear regression with too few parameters can lead to underfitting.</p> <p>3. Regularization techniques are too strong: If you're using regularization techniques (e.g., L1 or L2 penalty) and they're too aggressive, your model might become too simple and unable to capture the underlying patterns.</p> <p>Symptoms of underfitting:</p> <p><i>High training error</i> <i>Low test accuracy</i> <i>Model doesn't generalize well</i></p> <p><i>To fix underfitting, you can try:</i></p> <ol style="list-style-type: none"> <i>1. Adding more features or inputs</i> <i>2. Using more complex models (e.g., neural networks)</i> <i>3. Reducing regularization strength</i> <i>4. Collecting more data</i> <p><i>Now, let's talk about</i></p>	

Questions	RAG	Without RAG	pdf
		<p>overfitting (also known as over-learning or memorization).</p> <p>Overfitting occurs when a model is too complex and learns the noise in the training data rather than the underlying patterns. As a result, it performs well on the training set but poorly on new, unseen data.</p> <p>Here are some common scenarios that can lead to overfitting:</p> <ol style="list-style-type: none"> 1. Too many features: If you have many features (e.g., inputs) compared to the number of samples in your dataset, your model might learn too much about the noise rather than the underlying patterns. 2. Complex models: Using complex models like neural networks with too many layers or parameters can lead to overfitting. 3. Insufficient regularization: If you're not using regularization techniques (e.g., dropout, L1/L2 penalty) or they're not strong enough, your model might learn too much from the training data. 	

Questions	RAG	Without RAG	pdf
		<p><i>Symptoms of overfitting:</i></p> <p>Low training error <i>High test error (accuracy)</i> Model performs well on training set but poorly on new data</p> <p>To fix overfitting, you can try:</p> <ol style="list-style-type: none"> 1. Reducing the number of features or inputs 2. Simplifying your model (e.g., fewer layers or parameters) 3. Increasing regularization strength 4. Collecting more data to improve generalization <p>In summary, underfitting occurs when a model is too simple to capture the underlying patterns in the data, while overfitting occurs when a model is too complex and learns the noise rather than the underlying patterns. By understanding these pitfalls, you can adjust your modeling approach to achieve better generalization performance.</p>	
15. How does defeasible reasoning differ	Response: According to the provided context, defeasible reasoning	Defeasible reasoning and deductive reasoning are two	We reason defeasibly when we retain the option to retract

Questions	RAG	Without RAG	pdf
from deductive reasoning?	<p>differs from deductive reasoning in that defeasible reasoning allows for exceptions and retraction of inferences upon acquiring new information. In contrast, deductive (or strict) inference rules represented by \rightarrow imply that if A_1, \dots, A_n are true, then B is also true with no exceptions.</p> <p>In other words, deductive reasoning involves making conclusions that necessarily follow from the assumptions, whereas defeasible reasoning involves making inferences that typically or probably follow from the assumptions, but may need to be retracted in exceptional circumstances.</p> <p>Sources:</p>	<p>types of logical reasoning that differ in their nature, scope, and application.</p> <p>Deductive Reasoning:</p> <p>Deductive reasoning is a type of logical inference where the conclusion necessarily follows from the premises. In other words, if all the premises are true, then the conclusion must also be true. Deductive arguments are typically presented as:</p> <p>Premise 1 Premise 2 \therefore Conclusion</p> <p>The key characteristics of deductive reasoning are:</p> <ol style="list-style-type: none"> 1. Necessity: The conclusion necessarily follows from the premises. 2. Universal applicability: The argument applies universally, meaning that it is always true. 3. No exceptions: There are no counterexamples or exceptions to the rule. <p>Examples of deductive reasoning include:</p>	<p>certain inferences upon acquiring new information. In contrast, deductive reasoning ensures that the truth of the premises guarantees the truth of the conclusion, without the possibility of retraction</p>

Questions	RAG	Without RAG	pdf
		<p><i>All humans are mortal. Socrates is human. ∴ Socrates is mortal.</i></p> <p>If all A's are B's and C is an A, then C must be a B.</p> <p>Defeasible Reasoning:</p> <p>Defeasible reasoning, also known as non-monotonic or defeasible logic, is a type of logical inference where the conclusion may not necessarily follow from the premises. Defeasible arguments are typically presented as:</p> <p>Premise 1 Premise 2 ∴ Conclusion (possibly)</p> <p>The key characteristics of defeasible reasoning are:</p> <ol style="list-style-type: none"> 1. Possibility: The conclusion might be true, but it's not guaranteed. 2. Contextual dependence: The argument depends on the context or specific circumstances. 3. Exceptions allowed: There may be counterexamples or exceptions to the rule. <p>Examples of defeasible</p>	

Questions	RAG	Without RAG	pdf
		<p>reasoning include:</p> <p><i>A bird is a type of animal that can fly. ∴ This penguin is likely not a bird (because it can't fly).</i></p> <p>If someone is an expert in AI, then they probably know machine learning. ∴ John is an expert in AI, so he might know machine learning.</p> <p>In summary:</p> <p><i>Deductive reasoning involves logical inferences where the conclusion necessarily follows from the premises.</i></p> <p>Defeasible reasoning involves logical inferences where the conclusion may not necessarily follow from the premises and depends on context or specific circumstances.</p> <p>While deductive reasoning is useful for making absolute statements, defeasible reasoning is more suitable for handling uncertain or ambiguous information.</p>	

sources:

1. ['/Users/joudi/Measuring_RAG_Effectiveness/data/Android data detection system.pdf:5:01f910cc029a838801722c7d835ee717',
'/Users/joudi/Measuring_RAG_Effectiveness/data/Android data detection system.pdf:0:24da249bbcd6237e791932211454532e',
'/Users/joudi/Measuring_RAG_Effectiveness/data/Android data detection system.pdf:2:4e084e10a9b82bff4677f3771960bf61',
'/Users/joudi/Measuring_RAG_Effectiveness/data/Examining_the_Integrity_of_Apples_Privacy_Labels.pdf:2:7630f490ce51da4415d34b9e85da65bb',
'/Users/joudi/Measuring_RAG_Effectiveness/data/Android data detection system.pdf:3:dca4bd21aaf5b2943cf859ff5e13c9c2']
2. ['/Users/joudi/Measuring_RAG_Effectiveness/data/A Scoring System for Assessing Security and Privacy Risks of Pre Installed Applications.pdf:1:0d6f8ed2feb07ce8959135787159d6cc',
'/Users/joudi/Measuring_RAG_Effectiveness/data/Runtime Permission Issues in Android Apps.pdf:20:891b1256619d54b62d3d44c5ade00592',
'/Users/joudi/Measuring_RAG_Effectiveness/data/Runtime Permission Issues in Android Apps.pdf:5:5a8f01b41841e083f8836af30984245e',
'/Users/joudi/Measuring_RAG_Effectiveness/data/Android Mobile OS Snooping By Samsung, Xiaomi, Huawei and Realme Handsets.pdf:2:2cabb0a9f1d112afcf8e9c617c22626b',
'/Users/joudi/Measuring_RAG_Effectiveness/data/Android data detection system.pdf:2:6f56bb5e09d7ad22a49ad9b2ea5fa8e6']
3. ['/Users/joudi/Measuring_RAG_Effectiveness/data/Anonymous Trillemma.pdf:15:aba7bf37785b4f12eab1b164eb233cab',
'/Users/joudi/Measuring_RAG_Effectiveness/data/Anonymous Trillemma.pdf:0:79cd27e75e28d860ffde967182325460',
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'/Users/joudi/Measuring_RAG_Effectiveness/data/Anonymous Trillemma.pdf:0:ae1ed72cb91f681fa50df1c2950173d0']
4. ['/Users/joudi/Measuring_RAG_Effectiveness/data/Apple privacy of default apps.pdf:3:d9ecc5563b16edf707443f12a490185a',
'/Users/joudi/Measuring_RAG_Effectiveness/data/Apple privacy of default apps.pdf:3:ea8014b46b470c41b0a45ecdbd4b9cb4',
'/Users/joudi/Measuring_RAG_Effectiveness/data/Apple privacy of default apps.pdf:0:48b208ca16f13234b9bc242f67ae13a1',
'/Users/joudi/Measuring_RAG_Effectiveness/data/Apple privacy of default apps.pdf:3:fb9f42e52a1225d6182ab7abcfa6c6a8',
'/Users/joudi/Measuring_RAG_Effectiveness/data/Apple privacy of default apps.pdf:3:c9bc88b7e7bcb3652e7fdf681cdc6cca']

5. ['/Users/joudi/Measuring_RAG_Effectiveness/data/6-CNS1-VisualPerception-LaurenzWiskott-LectureNotes.pdf:11:d690f9421e48136107f702c9b07aeda2',
'/Users/joudi/Measuring_RAG_Effectiveness/data/6-CNS1-VisualPerception-LaurenzWiskott-LectureNotes.pdf:11:18849e3f2e589359002527d23875918c',
'/Users/joudi/Measuring_RAG_Effectiveness/data/6-CNS1-VisualPerception-LaurenzWiskott-LectureNotes.pdf:8:a2e12b21b5b0261777783a20a338d52b',
'/Users/joudi/Measuring_RAG_Effectiveness/data/6-CNS1-VisualPerception-LaurenzWiskott-LectureNotes.pdf:10:88816f0582ae2101b05014c7ee4b2c7a',
'/Users/joudi/Measuring_RAG_Effectiveness/data/6-CNS1-VisualPerception-LaurenzWiskott-LectureNotes.pdf:9:c45981723196707eb09eb9afe7f3a06c']
6. ['/Users/joudi/Measuring_RAG_Effectiveness/data/Apple privacy of default apps.pdf:3:d9ecc5563b16edf707443f12a490185a',
'/Users/joudi/Measuring_RAG_Effectiveness/data/Apple privacy of default apps.pdf:11:d07ef653c09849b84d91c55cdf9267e5',
'/Users/joudi/Measuring_RAG_Effectiveness/data/A Scoring System for Assessing Security and Privacy Risks of Pre Installed Applications.pdf:1:ee2d585390a4b5dd1ac8eacb9b879a81',
'/Users/joudi/Measuring_RAG_Effectiveness/data/Android Mobile OS Snooping By Samsung, Xiaomi, Huawei and Realme Handsets.pdf:1:36b64f2a0ca16887568f08823e88a7fc',
'/Users/joudi/Measuring_RAG_Effectiveness/data/Apple privacy of default apps.pdf:1:71121211e2044a9de09883260e11a595']
7. ['/Users/joudi/Measuring_RAG_Effectiveness/data/kapitel_01.pdf:6:c3b41d3f35c70fb96869d5c1f632edf2',
'/Users/joudi/Measuring_RAG_Effectiveness/data/kapitel_07.pdf:63:ef7188db035f607a8efb7de d08b2a36c',
'/Users/joudi/Measuring_RAG_Effectiveness/data/kapitel_01.pdf:14:753c338290378f5507baf9e e02c2b3e7',
'/Users/joudi/Measuring_RAG_Effectiveness/data/kapitel_01.pdf:4:68c0e1ae9702580acba9a70 239f56e7d',
'/Users/joudi/Measuring_RAG_Effectiveness/data/kapitel_07.pdf:65:df0051f08266fc0def1523e3 17309829']
8. ['/Users/joudi/Measuring_RAG_Effectiveness/data/kapitel_04.pdf:5:40e5199c146b8e10f41d85c 3cc67f29e',
'/Users/joudi/Measuring_RAG_Effectiveness/data/kapitel_02.pdf:3:0b534fd65c89defb0d7418fb 076d65e1',
'/Users/joudi/Measuring_RAG_Effectiveness/data/kapitel_02.pdf:28:893f8f9804a43b41b960e0b 24bbe2fb4',
'/Users/joudi/Measuring_RAG_Effectiveness/data/kapitel_02.pdf:8:7d01490044a485dfc0985cf1 37518a6a',
'/Users/joudi/Measuring_RAG_Effectiveness/data/kapitel_04.pdf:57:ee8769b5ee45ef681f3be2f c8bfea72b']

9. ['/Users/joudi/Measuring_RAG_Effectiveness/data/kapitel_02.pdf:28:893f8f9804a43b41b960e0b24bbe2fb4',
'/Users/joudi/Measuring_RAG_Effectiveness/data/kapitel_06.pdf:5:9f269254803092388f805b4876b36756',
'/Users/joudi/Measuring_RAG_Effectiveness/data/kapitel_02.pdf:3:0b534fd65c89defb0d7418fb076d65e1',
'/Users/joudi/Measuring_RAG_Effectiveness/data/kapitel_02.pdf:32:6e37a395f076e0e4a6aac1f16ae147e1',
'/Users/joudi/Measuring_RAG_Effectiveness/data/kapitel_04.pdf:5:40e5199c146b8e10f41d85c3cc67f29e']
10. ['/Users/joudi/Measuring_RAG_Effectiveness/data/kapitel_04.pdf:44:25f3a685560ce4c480092b20ee01d69d',
'/Users/joudi/Measuring_RAG_Effectiveness/data/kapitel_04.pdf:48:1934b0f602279e02d5dfe8c42713feaa',
'/Users/joudi/Measuring_RAG_Effectiveness/data/kapitel_04.pdf:57:ee8769b5ee45ef681f3be2fc8bfea72b',
'/Users/joudi/Measuring_RAG_Effectiveness/data/kapitel_02.pdf:68:430cf7ac85711f1de9478f22743e9f53',
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comments:

- since we use rag, we dont have to specify what exactly is meant, for example using rag to answer q.6, it was directly understood the we meant cell in AI and not human cell like the answer without rag.
- Q10 is answered wrongly.
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