



## تقديم

أعزائي طلاب الفرقة الاولى حاسبات كفر الشيخ ، والى كل من يرغب فى فهم المنهج :  
يسعدنى أن أقدم لكم شرحاً وافياً لأبواب المنهج فى صورة مركزة وبسيطة فى نفس  
الوقت ، وطريقة الوصول إلى الإجابة الصحيحة بأقصر الطرق المباشرة ، وشرحاً مبسراً  
للمنهج ، مخنوماً بامتحانات السنوات السابقة للتطبيق والتدريب .

مع خالص تمنياتى لكم بالتفوق

FCIGroup



## ❁ Chapter 1 ❁

**Privacy**:-control of information about oneself.  
-freedom from intrusion and surveillance.

### **Privacy threats**:-

- theft of information.
- leakage of information through negligence and surveillance.
- unauthorized use or release by insiders "people who maintain the information"
- our own actions ,sometime intentional or when we unaware of information.

### **How companies build a detailed picture of a person?**

- before, accessing information take long time.
- now, database contain personal information, companies combine these information to obtain picture detailed.

### **Risks of technology**

- record our words.
- miniaturization put in camera..
- GpS enable people to determine the location.
- check the results of medical tests on the web.
- power and water provides determine the amount of water and electric which we use.
- law enforcement agencies ,reduce crime and increasing privacy or threaten privacy and liberty.

## Risk of technology ?could this scenario happen>

- snap a photo to a one on the street.
- match a photo to one in a social media.
- access to information such as (age, name)from his account.
- this doesn't require super computer but done with smart phone.

## Why store search query?

For companies:-analyzing search query about

- what kind of products.
- features/people looking.
- meet consumer preference.

For search engine companies want to know:-

- how many pages of search results user look at.
- how many they click on.
- What spelling error they make.

For companies analyze the data to:

- improve search services.
- develop new services.
- target agvertising better

Re-identification :-identifying individual from anonymous data such as journalists identify people who search them by hobbies, health problems, sports team , car own.

## Smart phones

- allow applications to send location data without your knowledge.
- allow applications to access to your email.
- allows applicaions to copy photos.
- free mobile banking stored account number.

## Stored and lost data

Personal information stolen by:-

- hacking into computer system.
- stealing computers and disks.
- by records.
- bribing employes of company who store data

## Summary of risks

- software is complex , people don't know what software collects and store.
- the existence of data represent risk.
- collection of information can give picture detailed.
- information in a website available to anyone.
- records is a tool to know information.
- the government sometime demand personal information.



**personal information**:-any information relating to an individual person..

**Invisible information gathering**:-describe collection of information without the person knowledge., examples such as:-

Event data records	In cars record the driving speed wheather or not the driver is wearing seltbelt.
History sniffer	Are programs that collect information and depend on various color of Browsers that can display recently visited.
spyware	Download from the web without the person's knowledge and collect information and send it to company.
Policy statement/ Customer agrrement	Many companies have policy statement to inform customer to use their information but they don't read it so they can collect information easily.

**Why companies collect information?**

For **secondary use**:-use personal information for purpose.,such as:-

- sale information customers to marketers or business.
- use information in political paths.
- search to find people who have high income.
- show supermarket databases to show lcohol purchases.



## Example of secondary use:-

<u>Date mining</u>	-means searching and analyzing mass of data to find new information or knowledge.
<u>matching</u>	-compining and comparing information from different databases.
<u>profiling</u>	-analyzing data to determine the characteristic of people to engage in certain behavior.

## Control over secondary use:-

Opt-in	-the person should check or click a box or signs a form permitting the use.
Opt-out	-the person doesn't take any action so, company may use his information.

## Fair information principle:-

- inform people when you collect information.
- collect only the data needed.
- maintain accuracy of data.
- keep security of data.
- keep the data as long as needed.
- develop principle to use the data.

## Chapter 2

### Fourth Amendment:-

-the right of people to be secure in their houses, papers, persons, against unreasonable search or seizures.

-protect privacy from the government intrusion.

### There are two problems that affect the fourth amendment:-

#### First problem:-

-personal information in huge databases.

-personal information on phone, computers.

-many laws allow law enforcement agencies to get information from nongovernment databases without court order.

#### Second problem:-

-new technology allows the government to search our houses, vehicles, search our persons without our knowledge, extract information from phone.

### Technology noninvasive but deeply revealing searches:-

-these technologies can search our houses, vehicles, but don't need to physically enter or open them.



## Examples

<u>Partical sniffer</u>	-detect drugs and exclusives.
<u>Imaiging system</u>	-detect guns
<u>Thermal imaging devices</u>	-search houses from outside.
<u>devices</u>	-that determine the location.
<u>devices</u>	-that analysis molecules of truck without opening it.

## Four cases of superme court

<b>Case 1</b>	-need court order even if new technology allows the government to access to our information.
<b>Case 2</b>	-law enforcement agancies don't need court order if you give your information to business such as banks.
<b>Case 3</b>	-the police couldn't use thermal imaiging devices to search a home from outside without search warrant.
<b>Case 4</b>	-search warrant must be specific. -if an officier see another file may contain thing, he can use it but don't use all information.





## Plain view

<u>Specific search area</u>	<p>-search warrant must be specific.</p> <p>-if an officier see another file may contain thing, he can use it but don't use all information</p>
<u>File's names</u>	<p>-might be considered in plian view but the contents of file aren't found.</p>
<u>Un-crypted files</u>	<p>-the government cant ask some one to un crypt the files for search warrant.</p> <p>-A person cannot be forced to satisfy against himself.</p> <p>-the court give the government a right to ask a person keys to be safe</p>

## ❁ chapter 3 ❁

**Acxiom web**:-provides pictures of consumers and prospects, powering all marketing and relation ship efforts.

### **Marketing**:-

-the most biggest use of personal information by business.

-20 th century:-businesss sent out catalogies, advertisements based on (age , gender).

-now, business store and analyze mass of data, customer's purchases ,government records.

-online retailers make recommendations to you based on prior purchases and similar buying patterns.

### **Examble of privacy threats**:-

-companies use face recognition system in video games ,televisions to target ads to individual person who 's playing games or watching tv.

-Democratic parts use databases to sure that people vote to their canadates.

**-informed consent:-**informing people about data collection and uses policies about the data that a particular device or application collects, each person can decide.

**-federal law** protects financial and medical information.

**-paying for consumer's information:-**

-companies should pay consumer for use their information.

-companies don't pay consumer directly, trade in data for the opportunity to win prizes.

-people don't understand all potential uses of their personal information and the long term consequences of the agreements.

-programs offer an opportunity of people with little money to trade something .

**-our social and personal activity** is the responsibility of organization and a person as well.

**-social network such as facebook:-**

-regularly introduce new services , new ways to share with friends.

-telling members about purchases that friends make.

-giving users IDS for advertisers.

-failing to detect members data.



## Responsibility of free services:-

-we should appreciate the amount of free services that available to us such as –social network companies , search engines , communication system .

-we can determine if we use it or not.

-business that run these free services have responsibility to its users.

-it's not ethically when offer free services for the chance to extract people.

## Life in cloud:-

### There are two problem:-

-**the first problem is** , people don't understand how the web works.such as , woman create a blog and give address to social people and discover that some one read it because she thought that special people only read it,,

-**the second problem is:-**, people want know lots of information about other such as , woman read profiles of others.

## Example of cloud:-

<u>Genealogy</u>	Sites are popular, people create family tree including names.
<u>web</u>	-there are sites that take children photos and names.  Organization dosent have the right to take these personal information.
<u>message</u>	-cellphone,email left message lots of time.  -messages are left month later.
<u>tax</u>	-millons of Amercan prepare their tax returns online.

Cloud:-sites that provide accounting services and access from anywhere.

## Cloud advantage and dis advantage:-

Cloud advantage	Cloud disadvantage
<ul style="list-style-type: none"><li>-we don't have to manage our own system.</li><li>-we don't have to do backups.</li><li>-we can get our files by accessinig via the internet.</li><li>-we can share files and collaborate with others</li></ul>	<ul style="list-style-type: none"><li>-we cant access files if the internet break down .</li><li>-Risks is privacy and securiety..</li></ul>

## Location tracking:-

Computers, communication services depend on knowing where a person is or object at a particular time.

## Tools for parents:-

<b><u>GPS</u></b>	<b>-allow people to determine the location.</b>
<b><u>RFID(radio frequently identification)</u></b>	<b>-in shoes/ clothes can be monitored.</b>
<b>Watch band</b>	<b>-for parents to monitor their children.</b>
<b>devices</b>	<b>-in car to determine the speed.</b>



**Cryptography**:-is the art and science of hiding data in plain sight.

**Encryption**:-is a technology that transform data into a form that's meaningless to anyone who might intercept or view it.

**Modern technology**:-

Digital signatures	Allows to sign documents online, saving time and paper for loan applications, business contracts.
Athenication method	-reduce the risk of unauthorized access to medical information online.
Digital cash	-secure financial transactions without the seller acquiring a credit card or checking account number from the buyer.



## Digital cash advantages and disadvantages

advantages	disadvantages
<p>-it isn't easy to link records of different transactions to form a consumer profile or dossier.</p> <p>-provide privacy protection for the consumer with respect to the organizations that deal with it.</p>	<p>-it harder for governments to detect and prosecute people who are "laundering money", spending money for criminal purpose.</p>

## Policies for protecting personal data:-

- A well designed databases for sensitive information include several features to protect against leaks, intruders, unauthorized access.
- each person authorized access should have an identifier and password.
- keep track of information about each access.
- privacy auditors check for leaks of information, review the company's privacy and its compliance with that policy, evaluate warnings and explanations on its website that alerts visitors when the site requests sensitive data.
- businesses have a position called "chief privacy officer" this person guides company privacy policy.
- system can restrict users from performing certain operations

such as writing or deleting files..

**Warren and Brandeis,thomson**

	<b><u>Warren,Brandeis</u></b>	<b><u>thomson</u></b>
<b>Differences</b>	<ul style="list-style-type: none"><li>-focus on personal information(publication)</li><li>-it conflicts with freedom of the press.</li></ul>	<ul style="list-style-type: none"><li>-there's no violation of privacy without violate other right.</li><li>-focus on how get the information.</li><li>-enclose privacy laws</li></ul>
<b>Similariuties</b>	<ul style="list-style-type: none"><li>-they see that there's no violation of privacy if a person concept to use his information.</li></ul>	-----



## Transactions

لو شخصين معاهم معلومه وانا عايزها المفروض اروح لمين فيهم؟ اروح للشخص الاول ولا التانى؟ ممكن انا اروح للشخص الاول واخذ الموافقه بتاعته على استخدام المعلومه او ممكن اروح للشخص التانى واخذ موافقه منه ايضا .يبقى لازم يكون فيه اتفاق على الشخص ال المفروض يدي موافقه على اخذ المعلومه ودا بنسميه المعاملات او الاتفاق.

## Public ownership

-people have a right about their information but there're two problem:-

### 1-activities and transactions

ودي قولنا لازم يكون فيه اتفاق على ان الشخص دا اللي يدي موافقه على المعلومه.

### 2-owning facts

-copyright protects intellectual property such as computer programs and music.

## Basic legal framework

-defines and enforces legal rights and responsibilities is essential to a complex society or economy.

## Tasks of basic legal framework

-enforcement of agreements and contracts.

### Contracts

Are a mechanism for implementing flexible and diverse economic transactions that take place over time and between people who don't know each other well or at all.

-set defaults for situations that contracts don't explicitly cover.

-set penalties for criminal offenses and breach of contracts.



**Q1.put true (T) or false (F) and correct the false sentence.**

search warrant can be in a **wide** search area. (false)

search warrant can be in a **specific** search area-

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Online retailers make recommendations to you based on **exact information about you.** (false)

online retailers make recommendations to you based on **prior purchases and similar buying patterns.**

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**Data mining** means analyzing data to determine the characteristics of people to engage in certain behavior. (false)

**profiling** means analyzing data to determine the characteristics of people to engage in certain behavior

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**opt-out** policy the person explicitly checks or clicks a box or signs form permitting the use. (false)

**opt-in** policy the person explicitly checks or clicks a box or signs form permitting the use

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online retailers make recommendations to you based on prior purchases and similar buying patterns. (true)

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social and personal activity is the responsibility of the companies and a person as well. (true)

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Re-identification is identifying the individual from a set of anonymous data. (true)

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the fourth amendment protects a right to privacy from government intrusion. (true)

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**authentication** allows us to "sign" documents online. (false)

**Digital signature** allows us to "sign" documents online

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**History sniffers** often downloaded from a website without the user knowledge. (false)

**Spyware** often downloaded from a website without the user knowledge.

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Privacy,  
Liberties ,

**Q2. Give the scientific term for the following definition.**

1-Enforces rights and responsibilities is essential to a complex ,robust society and economy for enforcement of agreements and contracts.

( **Basic legal framework** )

2-A technology that transform data to a form that is meaningless to anyone who might intercept or view it.

( **Encryption** )

3-secure financial transactions electronically without the seller acquiring a credit card or checking account number from the buyer.

( **Digital cash** )

4-control of information about oneself. ( **privacy** )

5-computer and communication services that depend on knowing exactly where a person or object is at a particular time.

( **location tracking** )

6-these technology can search our homes and vehicles but don't require pokice to physical enter or open them.

( **technology noninvasive but deebly revealing searches** )

7-Any information relating to , or traceable to, an individual person.

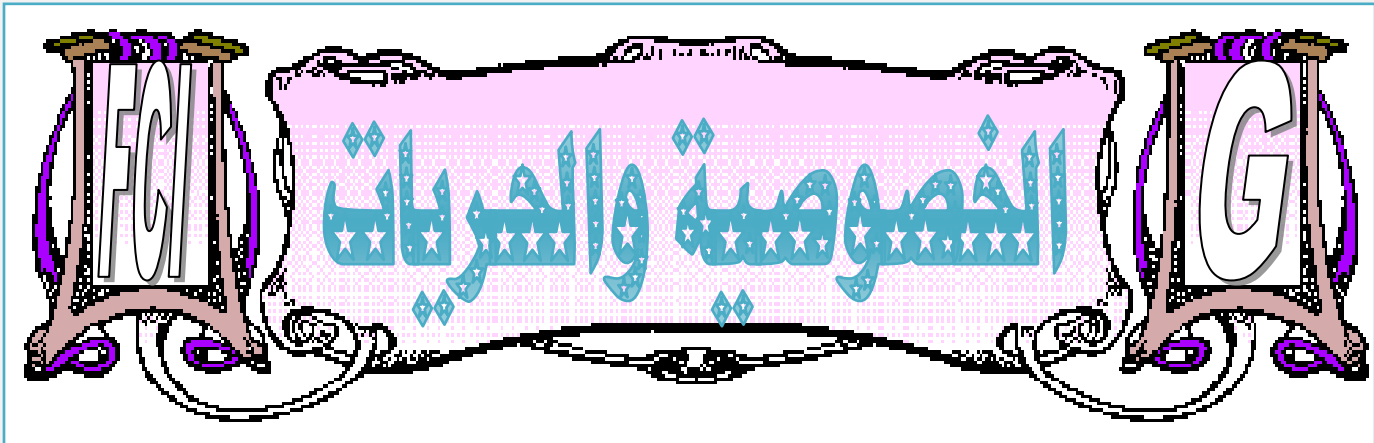
( **personal information** )

8-informing people about data collection and use policies or about the data that a particular device or application collects,each person can decide.

( **informed concept** )

9-the use of personal information for a purpose other than the one for which a person supplied it. ( secondary use )

10-combining and comparing information from different databases, often using an identifier. ( matching )





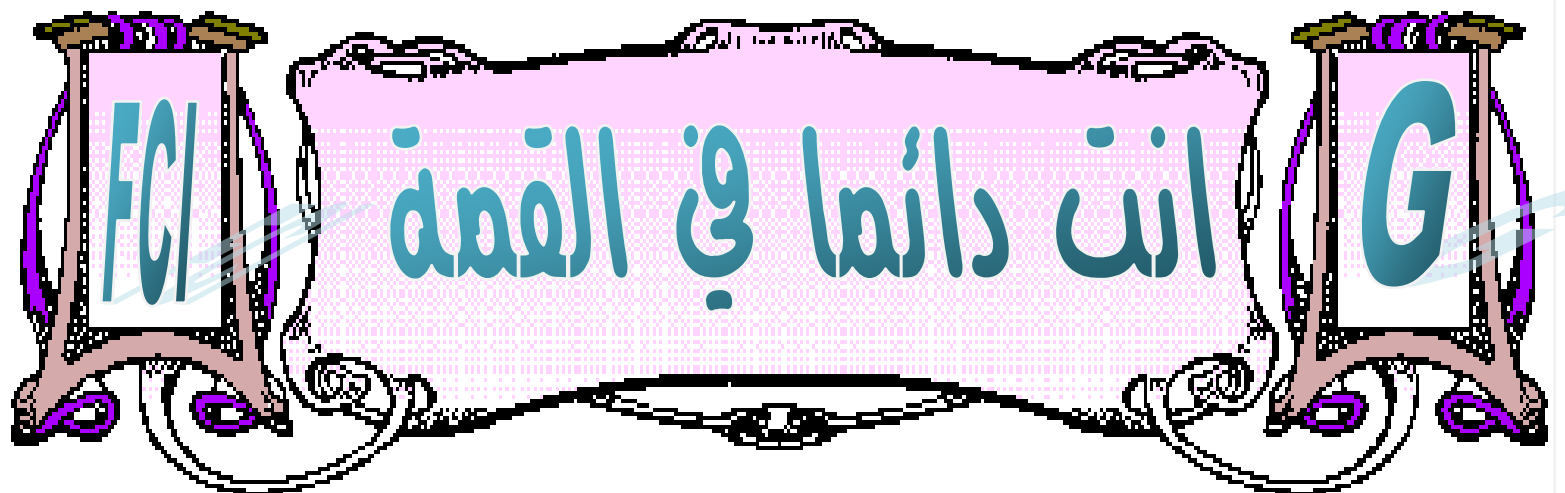
### Q3

#### 1-Discuss the policies for protecting personal data.

- A well designed databases for sensitive information include several features to protect against leaks, intruders, unauthorized access.
- each person authorized access should have an identifier and password
- keep track of information about each access.
- privacy auditors check for leaks of information, review the company's privacy and its compliance with that policy, evaluate warnings and explanations on its website that alerts visitors when the site requests sensitive data.
- businesses have a position called "chief privacy officer" this person guides company privacy policy.
- system can restrict users from performing certain operations such as writing or deleting files.

## 2-Write short notes about life in cloud advantages and disadvantages.

Cloud advantages	Cloud disadvantages
<ul style="list-style-type: none"><li>-we don't have to manage our own system.</li><li>-we don't have to do backups.</li><li>-we can get our files by accessinig via the internet.</li><li>- we can share files and collaborate with others.</li></ul>	<ul style="list-style-type: none"><li>- we cant access files if the internet break down.</li><li>- Risks is privacy and security</li></ul>



## Q4

### 1-what's invisible information gathering methods, give examples?

**Invisible information gathering**:- describe collection of information without the person knowledge., examples such as:-

<i>Event data records</i>	<i>In cars record the driving speed wheather or not the driver is wearing seltbelt.</i>
<b>History sniffers</b>	<b>Are programs that collect information and depend on various color of Browsers that can display recently visited</b>
<b>Spyware</b>	<b>Download from the web without the person's knowledge and collect information and send it to company</b>
<b>Policy statement/customer agreement</b>	<b>Many companies have policy statement to inform customer to use their information but they don't read it so they can .collect information easily</b>

2-

## Give three cases of that interpret in plain view concept?

<i>Specific search area</i>	<i>-search warrant must be specific.</i>  <i>-if an officier see another file may contain thing, he can use it but don't use all information</i>
<b>file's names</b>	<b>-might be considered in plian view but the contents of file aren't found.</b>
<b>Un-crypt files</b>	<b>-the government cant ask some one to un crypt the files for search warrant.</b>  <b>-A person cannot be forced to satisfy against himself.</b>  <b>-the court give the government a right to ask a person keys to be safe.</b>

## 3-list five risks of privacy via new technology?

- record our words-
- miniaturization put in camera
- check the results of -GpS enable people to determine the location
- medical tests on the web
- power and water provides determine the amount of water and electric which we use
- law enforcement agancies ,reduce crime and increasing privacy or threaten privacy and liberty

**Q5.**

**1-Discuss the companies methodologies in paying for consumer information?**

**-companies should pay consumer for use their information**

**-companies don't pay consumer directly, trade in data for the opportunity to win prizes**

**-people don't understand all potential uses of their personal information and the long term consequences of the agreements**

**-programs offer an opportunity of people with little money to trade something**

**2-Discuss differences and similarities between warren and brandeis and Thomson in their view of protecting privacy?**

	<i>Warren , brandeis</i>	<i>Thomson</i>
<b><u>differences</u></b>	<ul style="list-style-type: none"> <li>- focus on personal information(publication)</li> <li>- it conflicts with freedom of the press</li> </ul>	<ul style="list-style-type: none"> <li>- there's no violation of privacy without violate other right.</li> <li>- focus on how get the information.</li> <li>- enclose privacy</li> </ul>
<b><u>similarities</u></b>	<ul style="list-style-type: none"> <li>- they see that there's no violation of privacy if a person concept to use his information</li> </ul>	<p>-----</p>

## دعاء بعد المذاكرة

اللهم إني استودعك ما قرأت وما حفظت وما تعلمت  
فرده إلي عند حاجتي إليه ، إنك على كل شيء قدير