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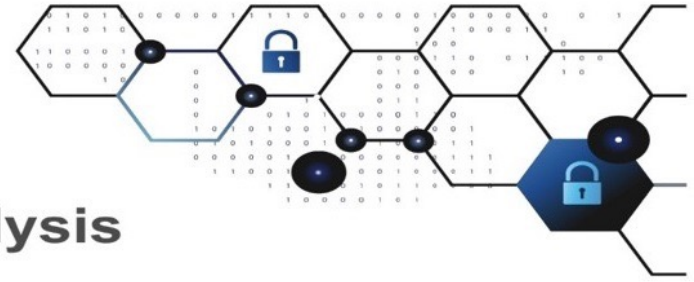
Connect the Disconnections - from Disparate Data to Insightful Analysis



Business understanding & data understanding Practical session

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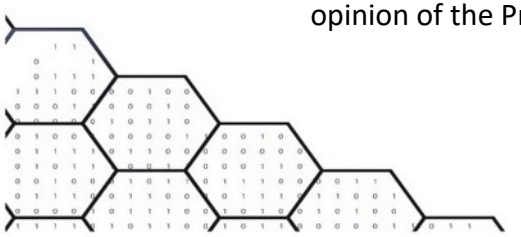

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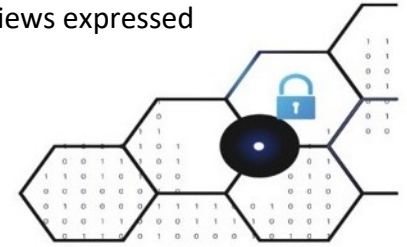


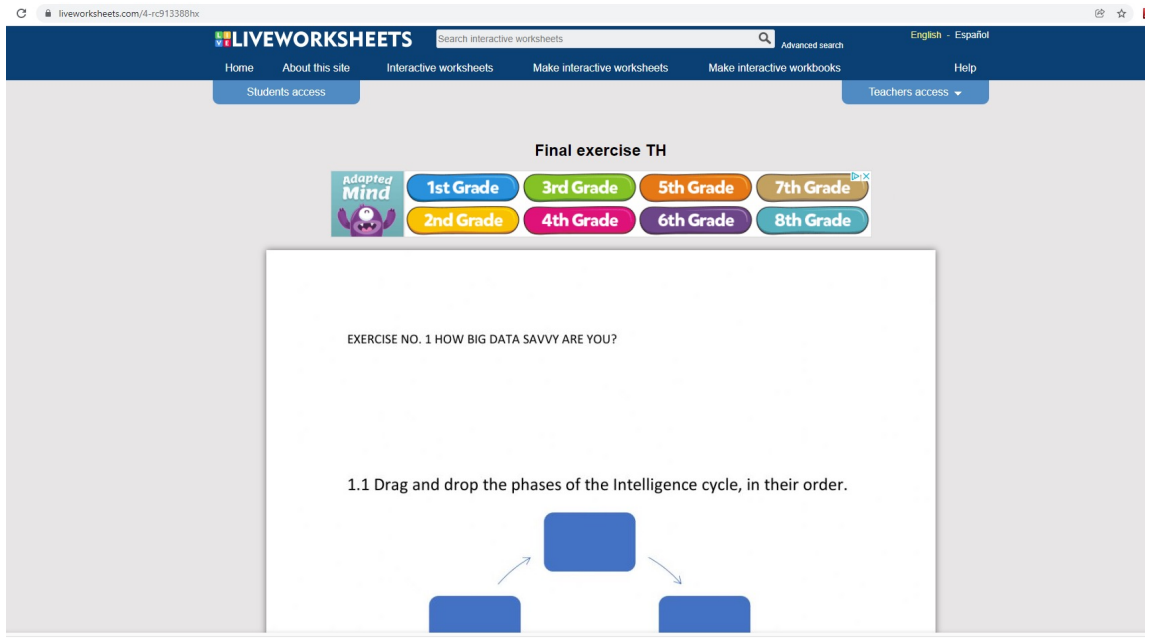
EXERCISE 1. How big data savvy are you?

- test your level of acknowledgment on big data and intelligence, based on the information provided on the BU&DU module

- Compilation of small exercises (Mix and Match, multiple choice)

Steps

- Access the following link: https://www.liveworksheets.com/4-yd973746ss
- The interactive worksheet includes three different exercises that will help you evaluate your knowledge on big data topics
- Exercise 1 – mix and match
- Exercise 2 – multiple choice
- Exercise 3 – mix and match



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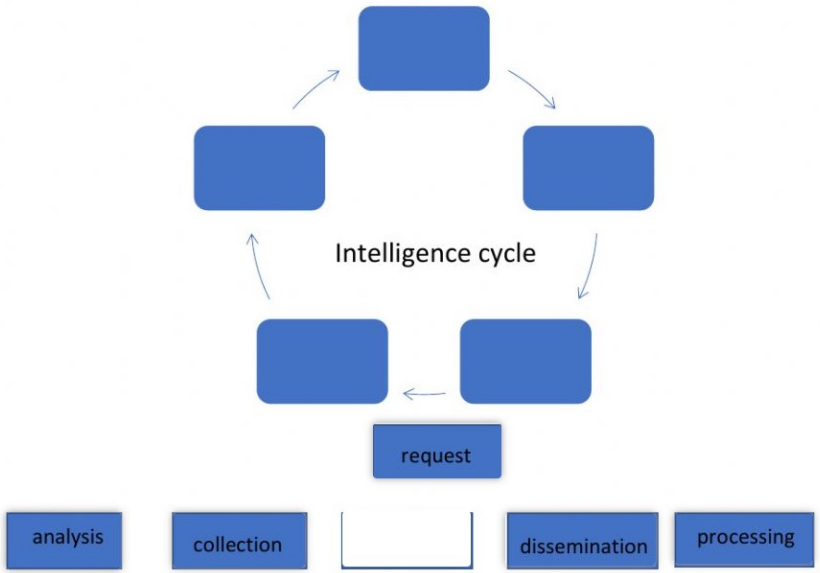
1.1 Drag and drop the phases of the Intelligence cycle, in their order.



1.2 Choose the correct answer.

I. In which domains can security organizations improve their performance by using big data?

A. availability of data, the collection of data, the utility of data;

B. data request process, collection of data, utility of data;

C. availability of data, the need for data, the utility of data.

II. Choose the defining elements of an algorithm in computer science:

A. starting point, stages, decisions, ending point;

B. starting point, attributes, decisions, ending point;

C. starting point, attributes, processes, ending point.

III. Which is the element that defines the activity of an organization?

A. its mission;

B. its social function;

C. its vision.

1.3 Match the fundamental types of tasks the algorithms address within an organization with its definitions/examples.

Algorithm	Definitions
classification	takes a large set of data defined by a large number of attributes and reduces the number of attributes, keeping only those with high degree of relevance
regression	aims to describe the typical behavior of an entity
similarity matching	evaluates and aims to identify similar entities based on data known about them
clustering	evaluates/ predicts the probability for an entity to belong to a class
co-occurrence	evaluates and aims to identify associations between entities based on transactions/ interactions involving them
profiling	evaluates and predicts connections between entities

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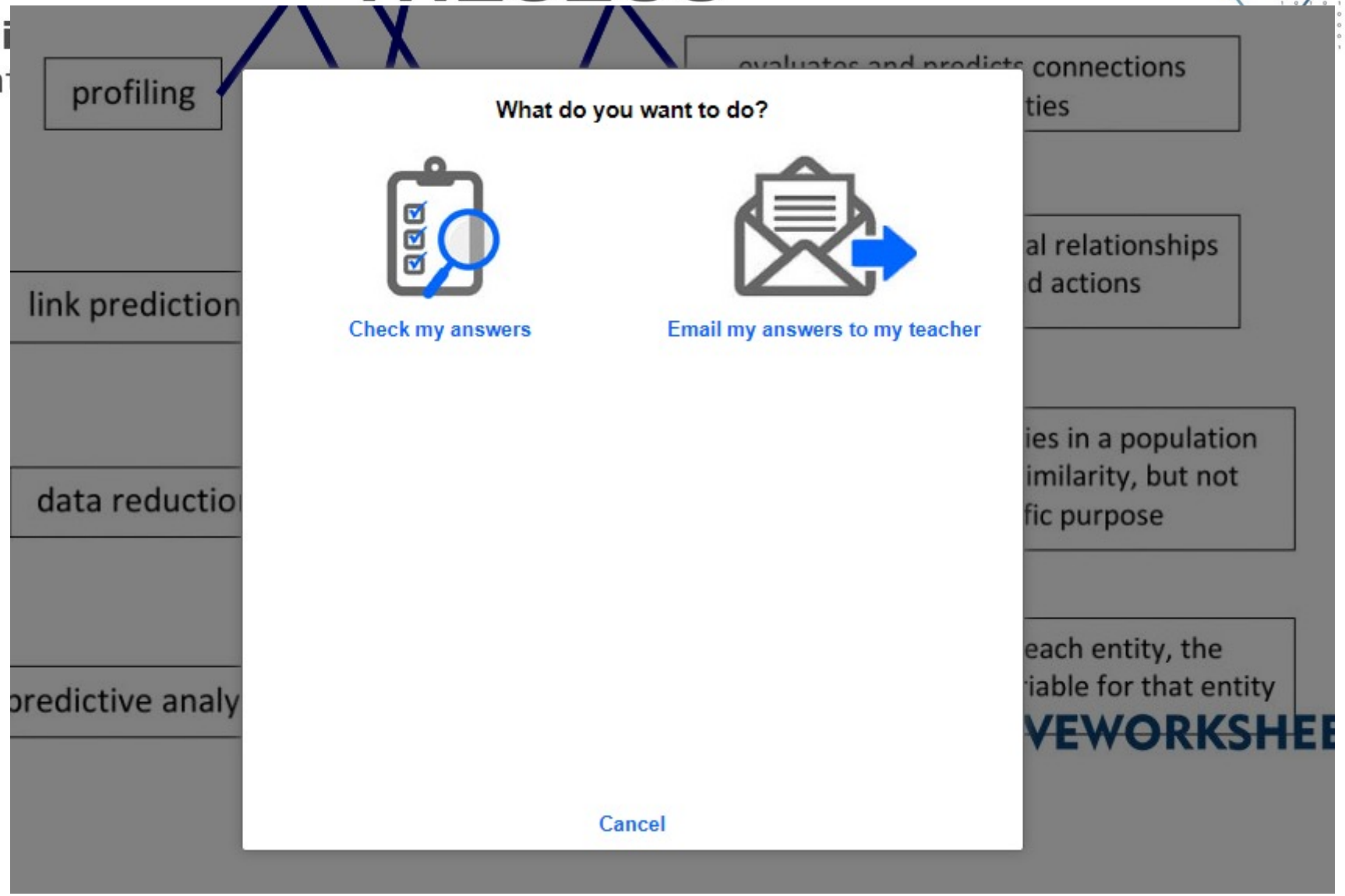


EXERCISE 2. Data sources

National-security related topic description

Cyber security has become in the past few years a new battlefield for silent, unpredictable wars. The term of cyber security defines the use of state-of-the-art technologies and processes for protecting all the systems, networks, programs, devices and data relevant to an entity from foreign intrusions and unauthorized exploitation.

PROBLEM?

an entity from foreign intrusions and unauthorized exploitation.

Identified problem – brief description

Problem documentation

List of relevant sources

For credibility, use the following scale:

Name of source	Type of source	Credibility
Ex. Social media	*external*	*1*

Please, make a prioritization of the sources you consider can be trusted and are the most relevant for defining the problem and providing possible solutions.

Collect.

Analyse.

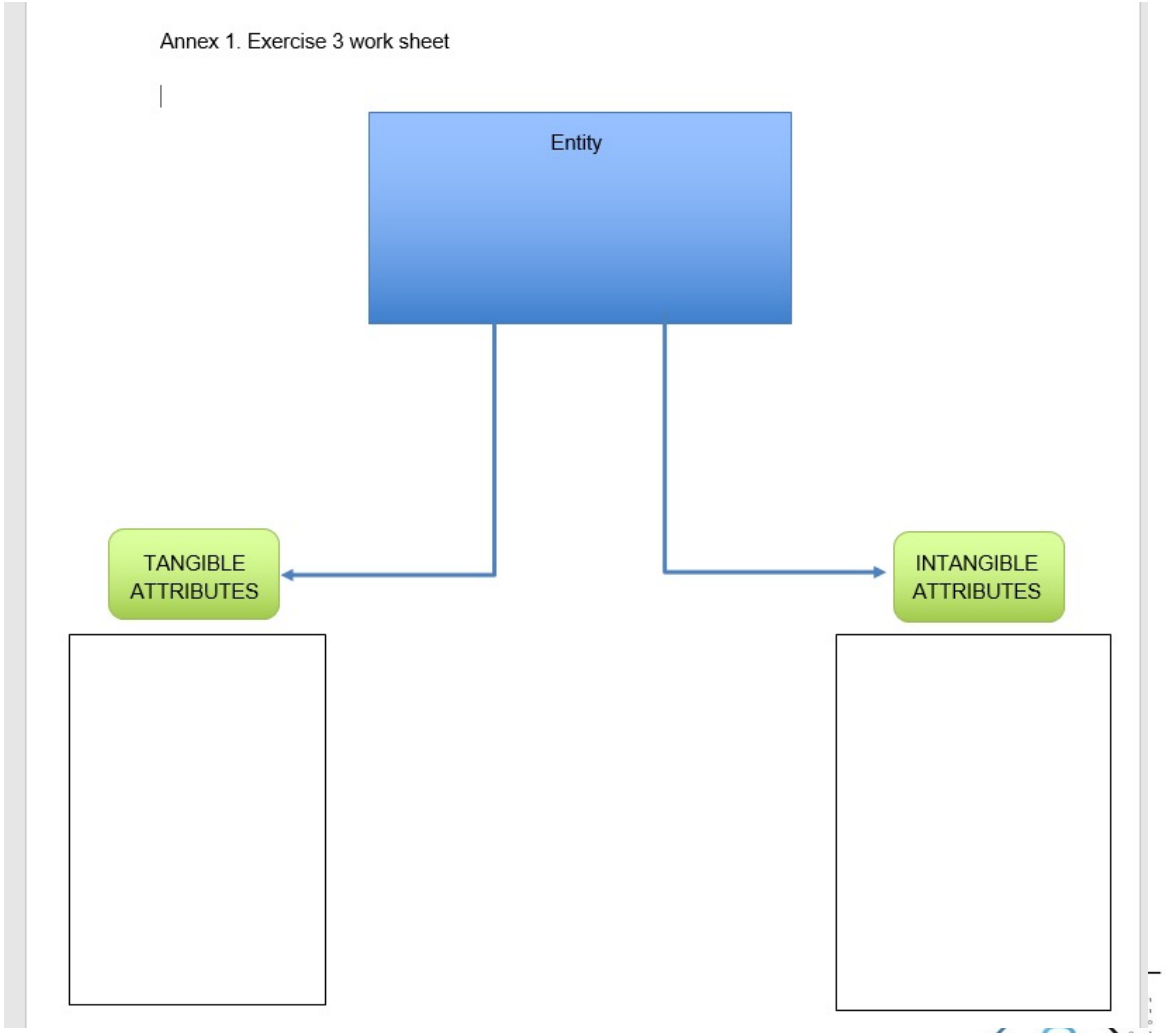
Synthetize..

EXERCISE 3. Attributes

Choose an entity.

Define 3 tangible attributes of the entity.

Define 3 intangible attributes of the entity.



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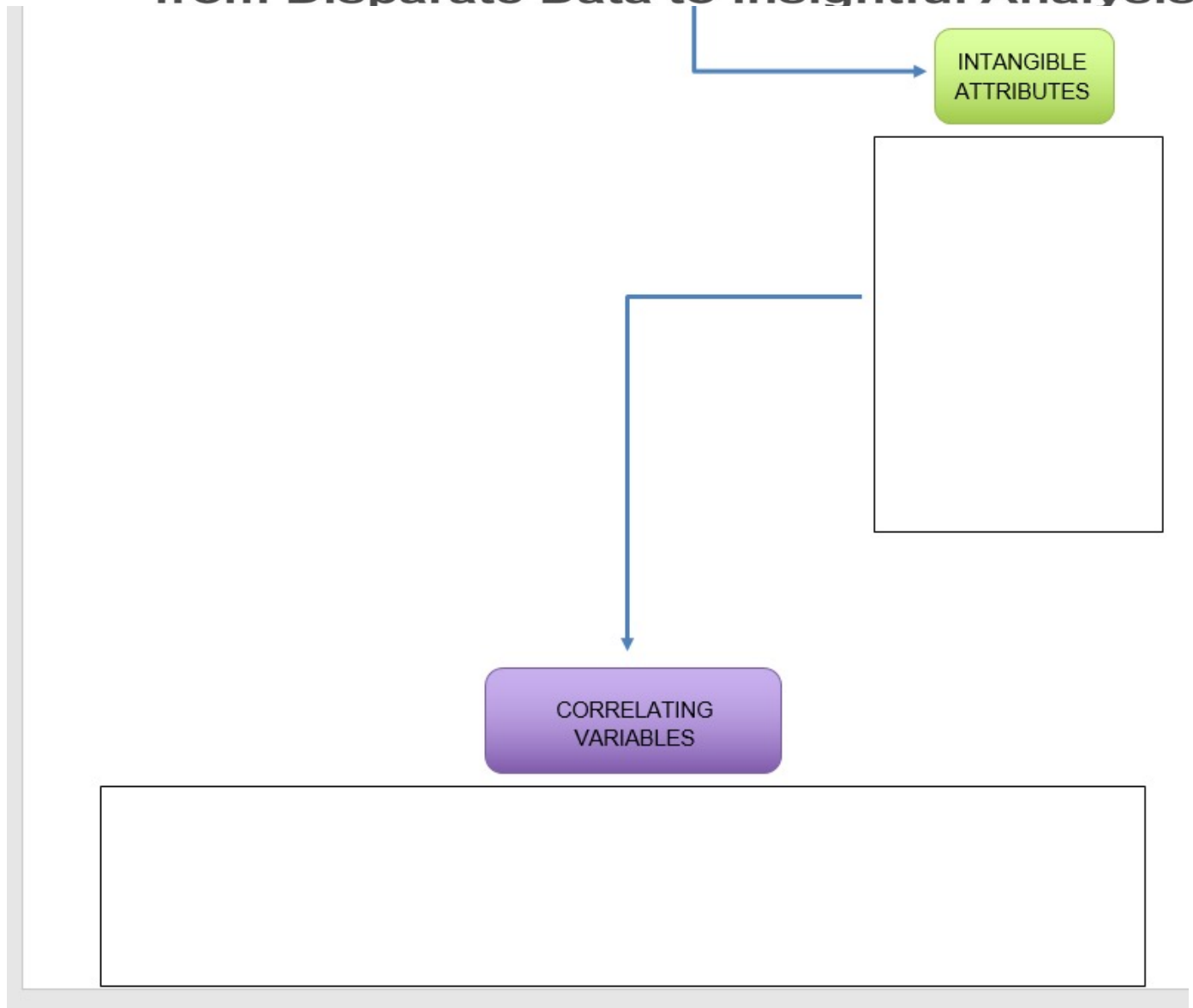

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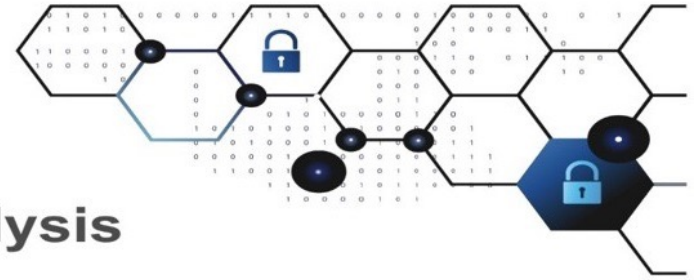
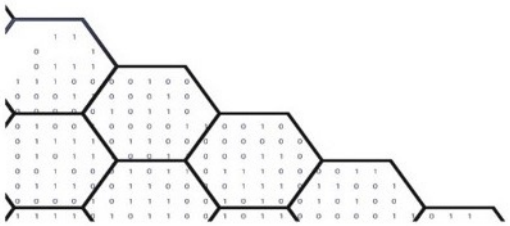


THANK YOU



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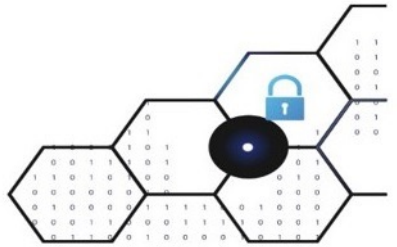
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