**Introduction to ADT**

1. **Watch the video at:**

[www.youtube.com/watch?v=92S4zgXN17o&list=PL2\_aWCzGMAwI3W\_JlcBbtYTwiQSsOTa6P&index=1](http://www.youtube.com/watch?v=92S4zgXN17o&list=PL2_aWCzGMAwI3W_JlcBbtYTwiQSsOTa6P&index=1) (6:33 min)

1. **Complete the following:**

DATA STRUCTURES

Data structures are the most ………. and ……..…. block concept in computer science.

Good knowledge of data structures is a must to …………..…. efficient software systems.

Different kinds of ……………….…. are needed to ………….... different kinds of data.

How we store, ………………. and ………….…. data in computers matters.

A formal definition of a data structure is: …………………………………………………..…….

The mathematical and logical model of a data structure is called ……….……. data type.

A list is an example of ………………. d…………….……. ………………...…..

ADT means ……………...…. ……………..……. …………………….…..

A ………………………...……. data type is the i……………….……. of an ADT.

The same ADT can be implemented by many ……..…….. data types.

A ………… ….. list is an example of …………………..….. data type.

Working with data types means both defining the …….…..data type and its ……….

1. **Answer the following questions:**
2. Why do we need to correctly manage data?
3. What kind of data are managed by computers?
4. Why does the organization of data in computers matter?
5. What does the abstract view of a data structure take into account?
6. Can ADT be implemented in programming languages? Provide some examples.