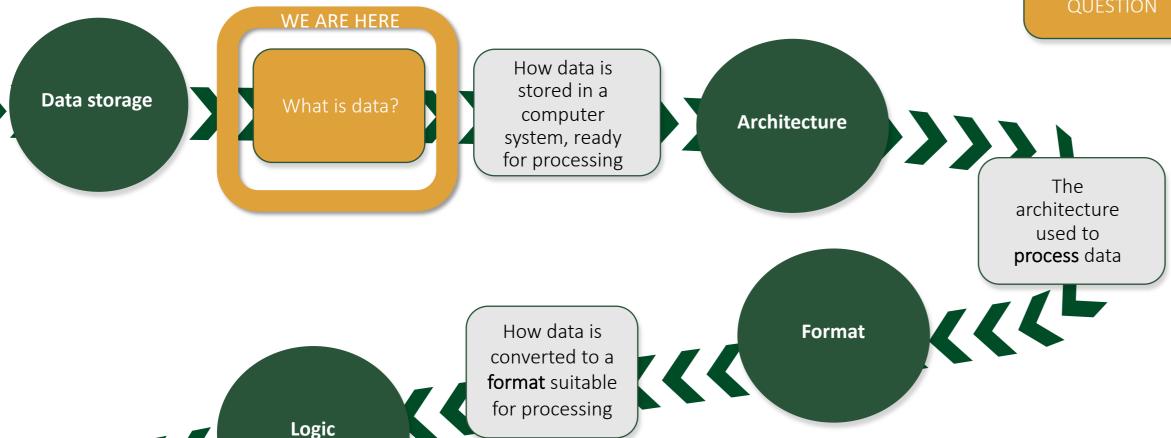# LEARNING JOURNEY COMPUTER SCIENCE

DATA STORAGE AND PROCESSING

GOLDEN THREAD QUESTION

Data affects every single topic in computer science. It is the "golden thread". Without data, there would be no purpose to computers. Computers are used to input, process, communicate and output data. Therefore, the computer science learning journey is **the journey of data**. In this next part of the journey, you will explore how data stored ready for processing; how it is processed and the architecture involved; the different "formats" of data and computational logic required to process it; the role programs and programming languages have to play and the importance of robust program design.

Data storage

WE ARE HERE

What is data?

How data is stored in a computer system, ready for processing

Architecture

The architecture used to **process** data

Format

How data is converted to a **format** suitable for processing

Logic

The computational **logic** involved in processing data

TUDOR HABITS
You will develop grit and resilience as you develop both systematic and computational thinking skills on this learning journey.

KEY VOCABULARY: Storage, processing, architecture, logic, programs/software, robustness, legislation

Programs and software

The role of programs and software in processing data

The purpose of program design

How data is kept secure in by **robustness** in program design

How robust programs and software can be supported by computing legislation