ASSEMBLY LANGUAGES

Assembly Language

Represents a number of languages

Is a low-level language

Assembly Language

Communicates directly with hardware

Specific to CPU

How Assembly Language Works

Bridge between software programs and underlying hardware

High-level language converted into machine language

Assembly Language

Is typically used for specific tasks
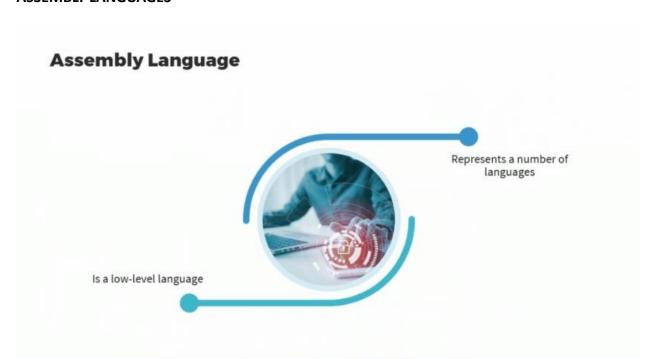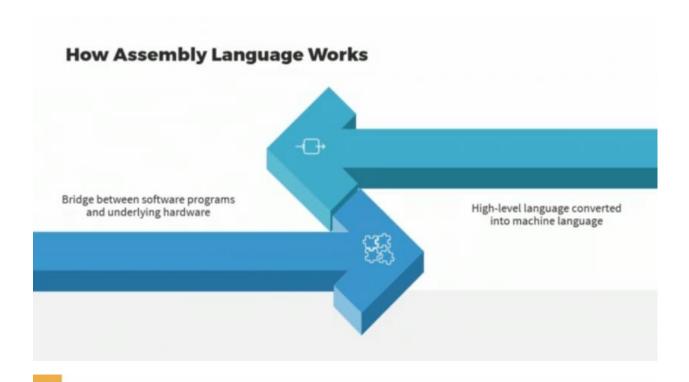
Device drivers, boot codes, low-level embedded systems

Advantages of Assembly Language

How programs interface with OS, BIOS and CPU

How data is represented in memory

How processor executes instructions

How instructions access and process data