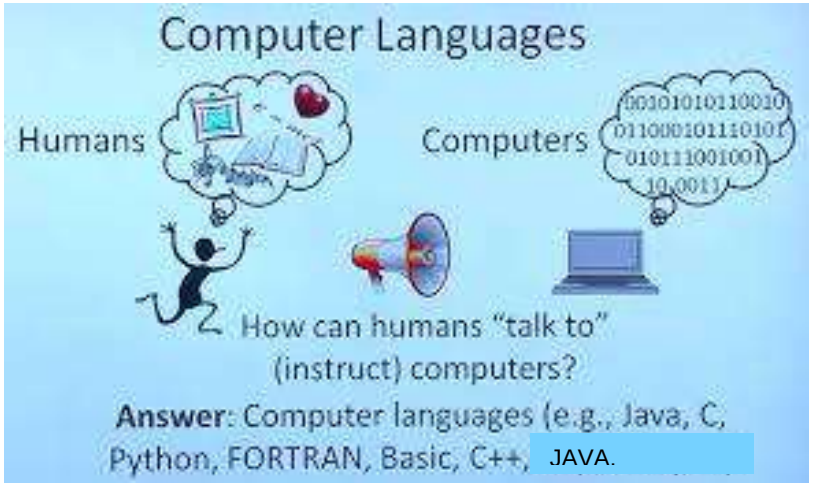
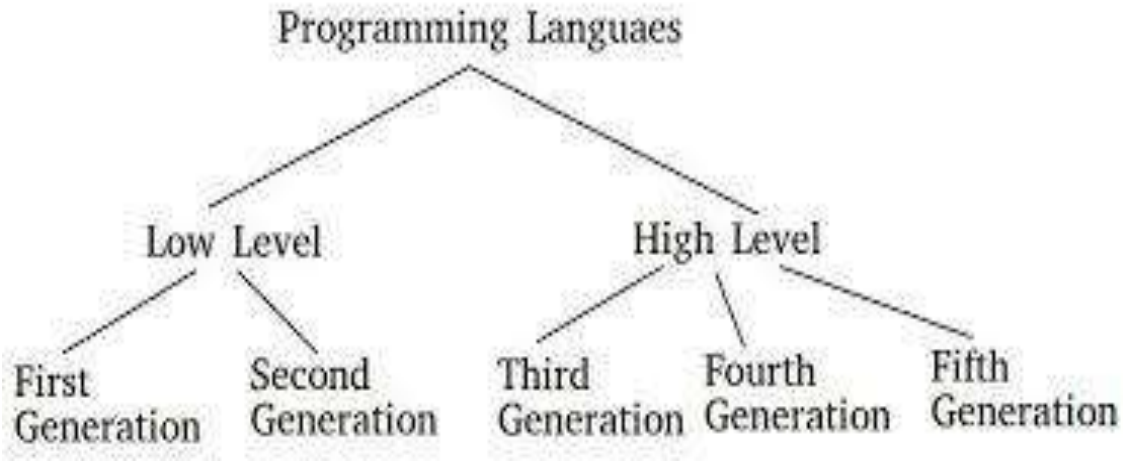
CLASS – 6

CHAPTER 1 COMPUTER LANGUAGE

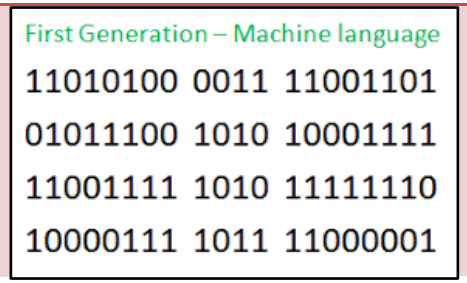
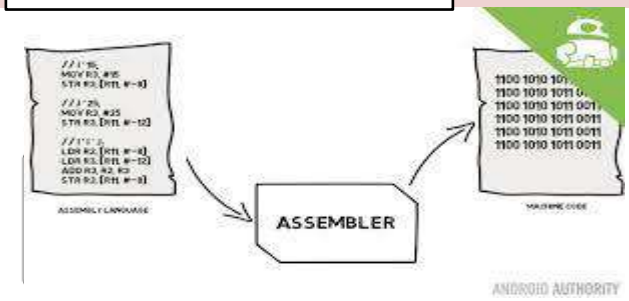
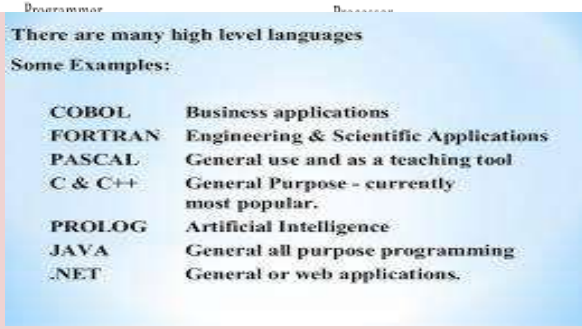
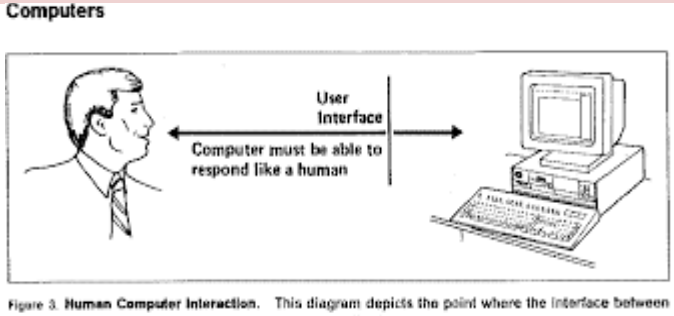
To communicate with the computers, we need some languages. These are computer languages.

There are different languages with the help of which we can develop computer programs. And they are –





- Lady Ada Lovelace is regarded as the **first computer programmer.**
- **Locator Identifier Separation Protocol (LISP)** was the first computer language for writing artificial intelligence programs. **John McCarthy** created it.
- The first interactive computer game was **Space war.**
- **John W. Tukey** first used the term software in 1957.

Languages	Features	
Machine (1st GL)	• Uses binary codes to depict operators and data. • Machine –Dependent • Only language directly understood	
Assembly (2nd GL)	• Mnemonic codes or symbols instead of binary numbers . • Machine Dependent. • Has to be converted into machine language by translator program (Assembler)	
High level (3rd GL)	• Uses English words and mathematical operators • Machine – independent • Has to be converted into machine language by translator programs (Interpreter and compiler)	
4th GL	• Machine Independent • (4GL) is a grouping of programming languages that attempt to get closer than 3GLs to human **language**, form of thinking and conceptualization. • Application development tool.	 Figure 3. **Human Computer Interaction.** This diagram depicts the point where the interface between

Language Translator

1. **Assembler** is a program that converts assembly level language (low-level language) into machine level language.
2. **Compiler** compiles entire C source code into machine code.
3. I**nterpreters** converts source code into intermediate code and then this intermediate code is executed line by line.