Chapter 1

1. Programs
2. Input unit, arithmetic and logic unit, central processing unit, and secondary storage unit.
3. Machine language, assembly language, and high-level language.
4. Compilers
5. Android
6. Beta
7. Accelerometer

Java Environments

1. Java
2. Javac
3. .java
4. .class
5. Bytecode

Object oriented programming

1. Encapsulation
2. Classes
3. Object-oriented analysis and design
4. Inheritance
5. UML (Unified Modelling Language)
6. Attributes

Computing Architecture and Programming

* 1. Input unit
  2. Programming
  3. Assembly language
  4. Output Unit
  5. Primary memory and secondary storage
  6. The arithmetic and logic unit
  7. The control
  8. Machine language
  9. The control unit
  10. Java
  11. C
  12. Transmission Control Protocol
  13. C++
  14. Edit, compile, load, verify, and execute
  15. Integrated Development Environment
  16. Java , java virtual machine
  17. Virtual machine
  18. Class loader
  19. Bytecode verifier
  20. Compilation phase: The java source code(.java file) is compiled by the Java compiler (javac) into bytecode(.class file).
  21. Execution Phase: the java virtual machine interprets and execute the bytecode converting it to specific instructions
  22. Object: A wristwatch is an object in the real world.

1. **Attributes: Size, color, brand, time format (12-hour/24-hour), digital/analog display, battery life.**
   1. **Behaviors: Displaying time, setting alarms, changing time, displaying date.**
   2. **Class: A blueprint for watches, defining attributes and behaviors.**
   3. **Inheritance: An alarm clock is a subclass of a wristwatch with additional alarm features.**

**Modelling: Designing a watch using software before manufacturing it.**

**Messages: Sending signals when an alarm goes off.**

**Encapsulation: The inner workings of the watch (gears, circuits) are hidden from the user.**

**Interface: Buttons or touchscreens used to interact with the watch.**

**Information Hiding: Users can set time without knowing the inner mechanism of the watch.**