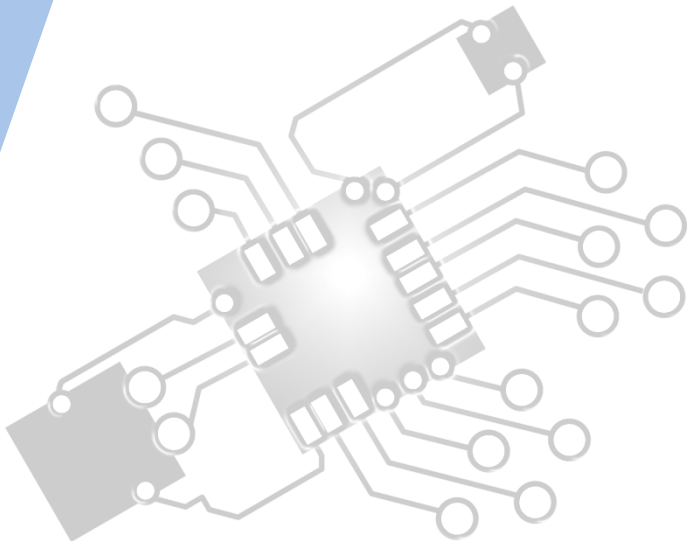




Objects as a programming concept

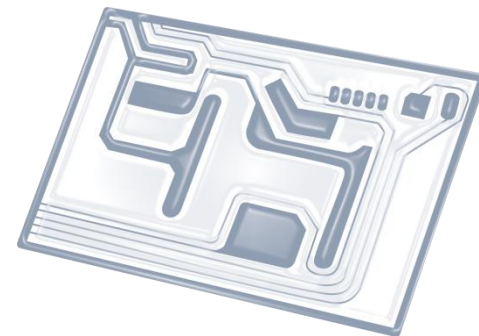
IB Computer Science



*Content developed by
Dartford Grammar School
Computer Science Department*



HL Topics 1-7, D1-4



1: System design



2: Computer Organisation



3: Networks



4: Computational thinking



5: Abstract data structures



6: Resource management



7: Control



D: OOP

HL & SL D.2 Overview

D.2 Features of OOP

- D.2.1 Define the term encapsulation
- D.2.2 Define the term inheritance
- D.2.3 Define the term polymorphism
- D.2.4 Explain the advantages of encapsulation
- D.2.5 Explain the advantages of inheritance
- D.2.6 Explain the advantages of polymorphism
- D.2.7 Describe the advantages of libraries of objects
- D.2.8 Describe the disadvantages of OOP
- D.2.9 Discuss the use of programming teams
- D.2.10 Explain the advantages of modularity in program development



1: System design

2: Computer Organisation



3: Networks

4: Computational thinking



5: Abstract data structures

6: Resource management

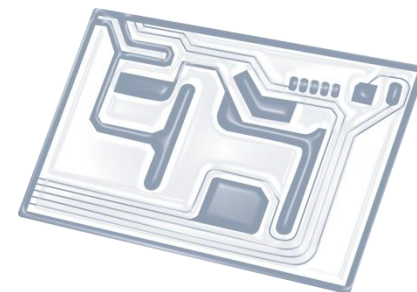


7: Control

D: OOP



Topic D.2.10

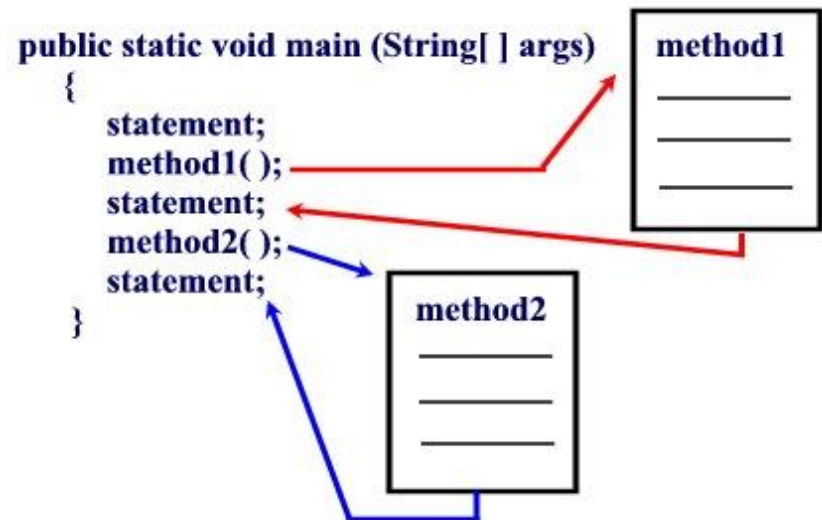


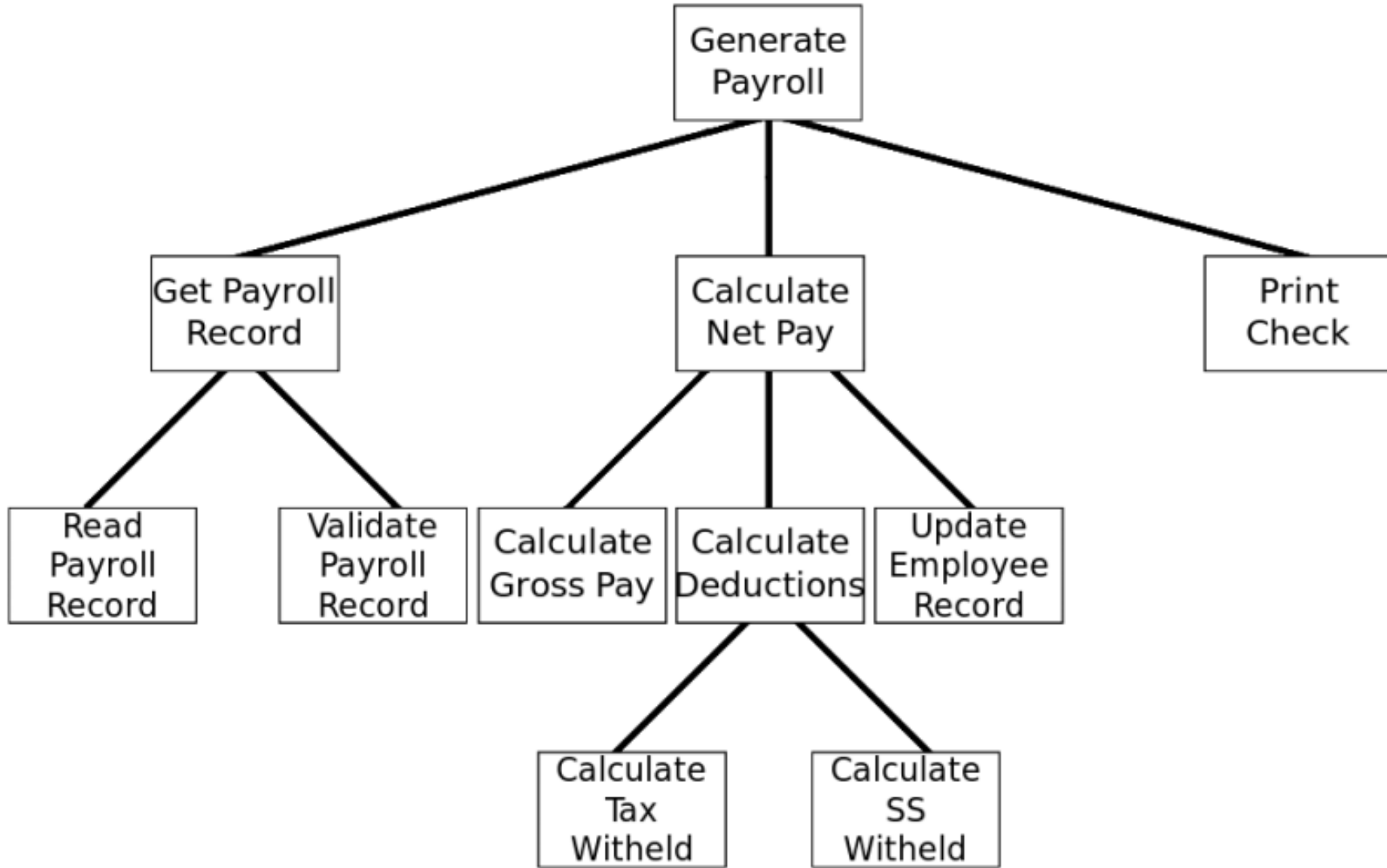
Explain the **advantages** of **modularity** in **program development**



Advantages

- Easier **debugging** and **testing**
- **Speedier** completion
- Code blocks **reusable**





Project Ara



https://www.youtube.com/watch?v=intua_p4kE0

<https://www.youtube.com/watch?v=oDAw7vW7H0c>