A company that makes Computer Assisted Design(CAD) software has, within its application, some utility classes that are used to perform 3D rendering tasks. The company's chief scientist has just improved the performance of one of the utility classes 'key rendering algorithms, and has assigned a programmer to replace the old algorithm with the new algorithm. When the programmer begins researching the utility classes, she is happy to discover that the algorithm to be replaced exists in only one class. The programmer reviews that class's API, and replaces the old algorithm with the new algorithm, being careful that her changes adhere strictly to the class's API. Once testing has begun, the programmer discovers that other classes that use the class she changed are no longer working properly. What design flaw is most likely the cause of these new bugs?
A. Inheritance
B. Tight coupling
C. Low cohesion
D. High cohesion
E. Loose coupling
F. Object immutability

B

A company has a business application that provides its users with many different reports: receivables reports, playables reports, revenue proyects, and so on. The company has just purchased some new, state-of-the-art, wireless printers, and a programmer has been assigned the task of enhancing all of the reports to use not only the company's old printers, but the new wireless printers as well. When the programmer starts looking into the application, the programmer discovers that because of the design of the application, it is necessary to make changes to each report to support the new printers. Which two design concepts most likely explain this situation?(Choose two.)
A. inheritance
B. Low cohesion
C. Tight coupling
D. High cohesion
E. Loose coupling
F. Object immutability

B, C

A team of programmers is involved in reviewing a proposed design for a new utility class. After some discussion, they realize that the current design allows other classes to access methods in the utility class that should be accesible only to methods within the utility class itself. What design issue has the team discovered?
A. Tight coupling
B. Low cohesion
C. High cohesion
D. Loose coupling
E. Weak encapsulation
F. Strong encapsulation

E