

Chapter 3 Homework

Multiple Choice

- | | | |
|------|-------|-------|
| 1. A | 6. B | 11. A |
| 2. A | 7. A | 12. C |
| 3. D | 8. D | 13. D |
| 4. C | 9. C | |
| 5. B | 10. B | |

True and False

- | | | |
|----------|-----------|-----------|
| 14. True | 16. False | 18. True |
| 15. True | 17. True | 19. False |

Find the Error

2. Corrections highlighted.

```
public int total(int value1, int value2, int value3)
{
    return value1 + value2 + value3;
}
```

Algorithm Workbench

2. Book Class

- a.

```
public Book(String title, String author,
            String publisher, int copiesSold)
{
    this.title = title;
    this.author = author;
    this.publisher = publisher;
    this.copiesSold = copiesSold;
}
```
- b.

```
public String getTitle() { return title; }
public void setTitle(String title) { this.title = title; }
public String getAuthor() { return author; }
public void setAuthor(String author) { this.author = author; }
public String getPublisher() { return publisher; }
public void setPublisher(String publisher) { this.publisher = publisher; }
public int getCopiesSold() { return copiesSold; }
public void setCopiesSold(int copiesSold) { this.copiesSold = copiesSold; }
```
- c.

| Book |
|---|
| - title: String - author: String - publisher: String - copiesSold: int |
| +getTitle(): String +setTitle(in title:String): void +getAuthor(): String +setAuthor(in author:String): void +getPublisher(): String +setPublisher(in publisher:String): void +getCopiesSold(): int +setCopiesSold(in copiesSold:int): void +Book(in title:String,in author:String, in publisher:String,in copiesSold:int) |

Short Answer

1. A class is the blueprint from which an instance is created.
2. A class is the blueprint, an object is the house.
3. An accessor reads the class's private member variables. A mutator writes to them.
4. Hiding the internal workings of a class allows one to change the implementation while maintaining backwards compatibility.
5. Only methods of the class have access.
6. new creates an instance of a class.