QUESTION 3

```
package a2;
//Our abstract parent class will be Book. All objects will be books. All classes will
inherit this class.
abstract public class Book {
	protected String name;
	protected int pagenumbers;
	protected String author;
	protected String publisher;
	protected String date;
	protected String genre;
	protected double price;
	protected String subject;
//-------------------------------------------General Shared Methods
	abstract public void Name();

	public void numberOfPages() {
	System.out.println("The number of pages in this book is " + pagenumbers +
".");
	}

	public void Author() {
		System.out.println("The author(s) is " + author + ".");
	}

    public void Publisher() {
		System.out.println("The publisher is " + publisher + ".");
	}

    public void Date() {
		System.out.println("This was pubished on " + date + ".");
	}

    public void Genre() {
		System.out.println("The genre of this book is " + genre + ".");
	}

	public void Price() {
		System.out.println("The price of this book is $" + price);
	}
   public void Subject() {

		System.out.println("The subject of this book is " + subject + ".");
	}
}
```

```
package a2;
public class Magazine extends Book{

	private String CoverStar;
//-------------------------------------------------constructor
```

```
        Magazine(String name, int pagenumbers,String author,String publisher,String
date,
                        String CoverStar, String genre, double price, String subject){
                this.name= name;
                this.pagenumbers = pagenumbers;
                this.author = author;
                this.publisher = publisher;
                this.date = date;
                this.CoverStar = CoverStar;
                this.genre= genre;
                this.price = price;
                this.subject = subject;
        }
//---------------------------------------original methods or abstract methods
        public void CoverStar() {
                System.out.println("The cover star for this issue is " + CoverStar +
".");
        }

        public void Name() {
                        System.out.println("The name of this magazine is " + name + ".");

                }
        }
```

```
package a2;
public class Textbook extends Book{
//---------------------------------------constructor
        Textbook(String name, int pagenumbers,String author,
                        String publisher, String date, String genre, double price,
String subject){
                this.name=name;
                this.pagenumbers= pagenumbers;
                this.author= author;
                this.publisher=publisher;
                this.date=date;
                this.genre = genre;
                this.price = price;
                this.subject = subject;
        }
//-----------------------------------original methods or abstract methods
        public void Name() {
                System.out.println("The name of this textbook is " + name + ".");

        }
}
```

```
package a2;
public class ScientificJournal extends Book{

        private String peer;
```

```
//-----------------------------------------constructor
	ScientificJournal(String name, int pagenumbers, String author, String
publisher,
                                    String date, String genre, double price,String
subject, String peer){
		this.name=name;
		this.pagenumbers = pagenumbers;
		this.author = author;
		this.publisher = publisher;
		this.date = date;
		this.genre=genre;
		this.price=price;
		this.subject=subject;
		this.peer=peer;
	}
//-------------------------------------original methods or abstract methods
	public void PeerReview() {

		System.out.println("This journal was peer reviewed by " + peer);
	}

	public void Name() {
		System.out.println("The name of this scientific journal is " + name +
".");

	}
}
```

```
package a2;
public class Novel extends Book{

	private String Pcharacter;
	private String series;
//-----------------------------------------Constructor
	Novel(String name, int pagenumbers,String author, String publisher, String
date,
			String genre, double price,String subject, String Pcharacter,
String series){

		this.name=name;
		this.pagenumbers = pagenumbers;
		this.author = author;
		this.publisher = publisher;
		this.date = date;
		this.genre=genre;
		this.price=price;
		this.subject = subject;

		this.Pcharacter=Pcharacter;
		this.series=series;
	}
//-------------------------------------original methods or abstract methods
	public void PrimaryChar() {
```

```
		System.out.println("The primary character of this novel is " +
Pcharacter + ".");
	}

	public void Series() {
		System.out.println("This novel is apart of the " + series + " series.");
	}

	public void Name() {
		System.out.println("The name of this novel is " + name + ".");

	}
}
```

Q3 DRIVER

```
package a2;
public class Q3Driver {

	public static void main(String[] args) {

		Magazine Vogue = new Magazine("Vogue",46, "Anna Wintour", "Penguin",
                                                    "22/03/2020", "Daisy
Ridley", "Non-Fiction", 24.99,"Lifestyle");
		Vogue.Name();
		Vogue.Genre();
		Vogue.numberOfPages();
		Vogue.Author();
		Vogue.Publisher();
		Vogue.Date();
		Vogue.CoverStar();
		Vogue.Subject();
		Vogue.Price();
		System.out.println(" ");

		Textbook JavaSolutions = new Textbook("Java Solutions",388, "Kenny
Slate", "Nelson",

	"17/06/2017", "Non-Fiction",149.99, "Information Technology");
		JavaSolutions.Name();
		JavaSolutions.Author();
		JavaSolutions.numberOfPages();
		JavaSolutions.Publisher();
		JavaSolutions.Date();
		JavaSolutions.Genre();
		JavaSolutions.Price();
		JavaSolutions.Subject();
		System.out.println(" ");

		ScientificJournal NG = new ScientificJournal("National Geographic", 37,
"Jane Smith", "Warner",

	"18/06/1985", "Non-Fiction",19.99, "War", "Walter Mason");
```

```
            NG.Name();
            NG.Author();
            NG.numberOfPages();
            NG.Publisher();
            NG.Date();
            NG.Genre();
            NG.Price();
            NG.Subject();
            NG.PeerReview();
            System.out.println(" ");

            Novel HP = new Novel("Harry Potter and the Chamber of Secrets", 287,
"J.K. Rowling","Penguin",
                                                "02/07/1998", "Fiction", 17.99,
"Fantasy", "Harry James Potter", "Harry Potter");
            HP.Name();
            HP.Author();
            HP.Publisher();
            HP.numberOfPages();
            HP.Date();
            HP.Genre();
            HP.Subject();
            HP.Price();
            HP.PrimaryChar();
            HP.Series();
      }
}
```

OUTPUT:

```
The name of this magazine is Vogue.
The genre of this book is Non-Fiction.
The number of pages in this book is 46.
The author(s) is Anna Wintour.
The publisher is Penguin.
This was published on 22/03/2020.
The cover star for this issue is Daisy Ridley.
The subject of this book is Lifestyle.
The price of this book is $24.99

The name of this textbook is Java Solutions.
The author(s) is Kenny Slate.
The number of pages in this book is 388.
The publisher is Nelson.
This was published on 17/06/2017.
The genre of this book is Non-Fiction.
The price of this book is $149.99
The subject of this book is Information Technology.

The name of this scientific journal is National Geographic.
The author(s) is Jane Smith.
The number of pages in this book is 37.
The publisher is Warner.
This was published on 18/06/1985.
```

The genre of this book is Non-Fiction.
The price of this book is $19.99
The subject of this book is War.
This journal was peer reviewed by Walter Mason

The name of this novel is Harry Potter and the Chamber of Secrets.
The author(s) is J.K. Rowling.
The publisher is Penguin.
The number of pages in this book is 287.
This was published on 02/07/1998.
The genre of this book is Fiction.
The subject of this book is Fantasy.
The price of this book is $17.99
The primary character of this novel is Harry James Potter.
This novel is apart of the Harry Potter series.