

### **Class: Book**

This class represents a book in the library

#### **Class Methods:**

Check\_availability: this method checks whether or not a book is available

Print\_details – prints details about the book

### **Class: Electronic Resources**

This class represents an electronic resource in the library

#### **Class methods:**

Print\_details: this method prints the details of the electronic devices in the list

Add\_device: this method accepts a device and adds it to the list of devices

### **Class: Electronic Devices**

This class represents an electronic device in the library

#### **Class methods:**

Print\_device\_details: this method prints the location and the availability of the device

### **Class: Library Member**

This class represents a member of library in the library system, ie student, tutor or admin.

#### **Class methods:**

Print\_user\_details: this method prints the details of the library member, for example, name, user ID, books borrowed and messages received

Print\_messages: this method prints all the messages received by the library member

Add\_books: this method adds a borrowed book of the list of borrowed books for the library member

Print\_books: this method prints all the details of the books currently borrowed

Number\_borrowed: this method Returns the number of borrowed books by a library member

### **Class: Library System**

This class represents the library system in the library

## **Class methods:**

**Print\_details:** this method prints the opening and closing details. Prints electronic resource and book details

**Check:** this method checks if electronic resources contains the resource

**Edit\_title:** this method edits the title of the given resource

**Search\_resource:** this method searches the electronic resource & book list for given resources

**Search\_isbn:** this method searches for resource using isbn value, prints total amount of found resources. Prints the book details

**Search\_author:** the method searches for resource using the author name, prints total amount of found authors and prints the book details

**Remove\_resource:** this method removes a resource from the electronic resource & book list

**remove\_book\_by\_position:** this method removes a book from book by specific position

**remove\_electronic\_resource\_by\_position:** this method removes an electronic resource from the electronic resource by specific position

**print\_all\_available:** this method returns all available items in the list book & electronic resource

**get\_number\_resources:** this method returns the number of resources in the electronic resources & book

**add\_resource:** this method adds a resource to the list, rejects resource if it already exists in the electronic resources & book

**lend\_book:** this method Lends the book to a library member

**return\_book:** this method Accepts a book return and records damages, if any

**messages:** this method sends Message sent to all library members currently holding books

**print\_all\_book\_details:** this method Prints all details for book resources

**print\_all\_electronic\_resource\_details:** this method Prints all details for electronic resources in resources