## YASH GUPTA 1BM21CS251

## Week 3

Create a class Book which contains four members: name, author, price, num\_pages. Include a constructor to set the values for the members. Include methods to set and get the details of the objects. Include a toString() method that could display the complete details of the book. Develop a Java program to create n book objects.

## **INPUT:**

```
import java.util.Scanner;
class book{
  String author;
  String name;
  int price;
  int num_pages;
  book(String name1,String author1,int price1,int pages){
     name=name1;
     author=author1;
     price=price1;
     num_pages=pages;
  }
  book(){
  }
  void setdetails(){
     Scanner sc=new Scanner(System.in);
     System.out.print("enter name of book: ");
     name=sc.nextLine();
```

```
System.out.print("enter author's name: ");
    author=sc.nextLine();
    System.out.print("enter price of book: ");
    price=sc.nextInt();
    System.out.print("enter num of pages: ");
    num_pages=sc.nextInt();
    System.out.println("DETAILS SET SUCCESSFULLY :)");
  }
  void getdetails(){
    System.out.println("NAME: "+name);
    System.out.println("AUTHOR: "+author);
    System.out.println("PRICE: "+price);
    System.out.println("NUM_PAGES: "+num_pages);
  }
  public String toString(){
    return("NAME: "+name+" AUTHOR: "+author+" PRICE: "+price+"
NUM_PAGES: "+num_pages);
  }
}
class exp3{
  public static void main(String args[]){
    int n;
    System.out.println("enter the number of books: ");
    Scanner sc=new Scanner(System.in);
    n=sc.nextInt();
    book b1[]= new book[n];
    for(int j=0; j< n; j++){
       System.out.println("ENTER DETAILS");
```

```
System.out.println("1:set using constructor\n2:set using method");
  int ch=sc.nextInt();
  if(ch==2){
    b1[j]=new book();
     b1[j].setdetails();
  }
  else{
     b1[j]=new book("TINKLE","ANONYMOUS",20,100);
  }
}
for(int j=0; j< n; j++){}
  System.out.println("\nPRINTING BOOK DETAILS");
  System.out.println("1:display using method\n2:display using toString");
  int ch=sc.nextInt();
  if(ch==1){
    b1[j].getdetails();
     System.out.println();
  }
  else{
     String details=b1[j].toString();
     System.out.println(details);
  }
}
```

## **OUTPUT:**

```
C:\Users\Admin\Desktop\1bm21cs251>java exp3
enter the number of books:
ENTER DETAILS
1:set using constructor
2:set using method
ENTER DETAILS
1:set using constructor
2:set using method
enter name of book: classmate
enter author's name: yash
enter price of book: 30
enter num of pages: 100
DETAILS SET SUCCESSFULLY :)
PRINTING BOOK DETAILS
1:display using method
2:display using toString
NAME: TINKLE
AUTHOR: ANONYMOUS
PRICE: 20
NUM PAGES: 100
PRINTING BOOK DETAILS
1:display using method
2:display using toString
NAME: classmate AUTHOR: yash PRICE: 30 NUM_PAGES: 100
```