

26/12/23

CLASSMATE
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Create a class Book which contains four members name, author, price, numPages. 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 would display the complete details of the book.

Develop a Java program to create one book object.

```
import java.util.Scanner;  
class Books {  
    String name;  
    String author;  
    int price;  
    int numPages;  
    Books(String name, String author, int price,  
        int numPages)  
    {  
        this.name = name;  
        this.author = author;  
        this.price = price;  
        this.numPages = numPages;  
    }  
    public String toString()  
    {
```

```
        String name, author, price, numPages;  
        return "Book name" + this.name + "\n" +  
            "Author Name" + this.author + "\n" +  
            "Price" + this.price + "\n" + "number of pages"  
            + this.numPages + "\n";  
    }
```

class BookMain

{
public static void main (String args[])

Scanner s = new Scanner (System.in);
int n; System.out.println ("Enter the name: ");
System.out.println ("Enter the number of books");
n = s.nextInt();
Books[] books = new Books [n];
for (int i=0; i<n; i++)

System.out.println ("Enter the details of the book");
System.out.println ("Name of the book");
String name = s.next();

System.out.println ("Author of the book");
String author = s.next();

System.out.println ("Price of the book");
int price = s.nextInt();

System.out.println ("Number of pages");
int numPages = s.nextInt();

books[i] = new Books (name, author, price,
numPages);

System.out.println ("Details of the book");
for (int i=0; i<n; i++) {

System.out.println (books[i]);

}

3

4

Output:

Enter the name:

Rushila V

Enter the usn:

1BMA2CS226

Enter the number of books:

3

Enter the details of the book

Name of the book

Divergent

Author of the book

Roth

Price of the book

230

Number of pages

123

Name of the book

Bracula

Author of the book

Stoker

Price of the book

345

Number of pages

276

Details of the book

Book name : Divergent

Author name : Roth

Price : 230

Number of pages : 123

1) cars
free
stack
stack
for
m
for
m
for
e
d

```
1) class TestStack {  
    public static void main (String args[]) {  
        Stack mystack1 = new Stack ();  
        Stack mystack2 = new Stack ();  
        for (int i=0; i<10; i++)  
            mystack1.push (i);  
        for (int i=10; i<20; i++)  
            mystack2.push (i);  
        System.out.println ("Stack in mystack1");  
        for (int i=0; i<10; i++)  
            System.out.println (mystack1.pop());  
        System.out.println ("Stack in mystack2");  
        for (int i=10; i<20; i++)  
            System.out.println (mystack2.pop());  
    }  
}
```

Output:

Stack in mystack1

10

20

30

40

50

Stack in mystack2

28

11

14

16

21

out : 600 = 100

new : 600 > 100

2) class Test

int a, b;

Test(int i, int j) {
 a = i; b = j;

boolean equals (Test o) {

if (o.a == a && o.b == b)

return true;

else

return false;

class Main {

public static void main (String args[]) {

Test ob1 = new Test(100, 22);

Test ob2 = new Test(100, 22);

Test ob3 = new Test(-1, -1);

System.out.println ("ob1 == ob2 : " + ob1.equals (ob2));

System.out.println ("ob1 == ob3 : " + ob1.equals (ob3));

}

Output :

ob1 == ob2 : true

ob1 == ob3 : false

3) class

unit

Test

a

3

Test

T

T

C

A

A

C

A

A

C

C

C

C

C

C

C

C

C

C

C

C

C

C

3) class Test {

 int a;

 Test (int i) {

 a = i;

}

 Test incByTen () {

 Test temp = new Test (2);

 Test ob2;

 ob2 = ob1.incByTen();

 System.out.println("ob1.a: " + ob1.a);

 System.out.println("ob2.a: " + ob2.a);

 ob2 = ob2.incByTen();

 System.out.println("ob2 after second increase:");

 System.out.println(ob2.a);

}

3

Output:

ob1.a: 2

ob2.a: 6

ob2.a after second increase: 22

4) class OverloadDemo {
 void test() {
 System.out.println("No parameters");
 }
 void test(int a) {
 System.out.println("a: " + a);
 }
 void test(int a, int b) {
 System.out.println("a and b: " + a + " " + b);
 }
 double test(double a) {
 System.out.println("double a: " + a);
 return a * a;
 }
}

class Overload {
 public static void main(String args) {
 OverloadDemo ob = new OverloadDemo();
 double result;
 ob.test();
 ob.test(10);
 ob.test(10, 20);
 result = ob.test(123.2);
 System.out.println("ob.test(123.2): " +
 result);
 }
}

Output:

No parameters

a: 10

a and b: 10 20

double a: 123.2

Result of ob.test(123.2): 15190.5625

123.2
15190.5625 ✓