#### **Assignment-1**

## Name-Rahul Gupta

Roll-Mca/10030/19

### P-1 Write a Program to whether a number is even or odd.

```
//EvenOddTest class
import java.util.Scanner;
public class EvenOddTest {
  public static void main(String args[])//main function
    Scanner sc=new Scanner(System.in);
    System.out.print("Enter The Number: ");
    int num=sc.nextInt();
    EvenOdd e=new EvenOdd();
    e.setNumber(num);
    e.checkEvenOdd();
    System.out.println("Number is : "+e.getNumber());
    if(e.getEvenOddN()==true)
       System.out.println("It is a Even Number");
    else
       System.out.println("It is is a Odd NUmber");
  }
//EvenOdd Class
class EvenOdd{
```

```
private int num;
     private boolean evenOdd;
     public void setNumber(int num) {
           this.num=num;
     public int getNumber()
           return num;
     public\ boolean\ getEvenOddN()
           return evenOdd;
     public void checkEvenOdd()
           if(num%2==0)
                 this.evenOdd=true;
            }
           else {
                 this.evenOdd=false;
            }
      }
}
```

# <mark>Output</mark>:

```
Output - JAVA_LAB_1 (ru... ×
                      Deleting: G:\MCA_4Th_Sem\MCA 3RD SEM LAB\JAVA LAB\JAVA_LAB_1\build\built-jar.properties
 00
                    deps-jar:
                    Updating property file: G:\MCA_4Th_Sem\MCA 3RD SEM LAB\JAVA_LAB_1\build\built-jar.properties
 Compiling 1 source file to G:\MCA_4Th_Sem\MCA 3RD SEM LAB\JAVA LAB\JAVA_LAB_1\build\classes
                   compile:
                    run:
                    Enter The Number: 20
                     Number is: 20
                     It is a Even Number
                     BUILD SUCCESSFUL (total time: 6 seconds)
Output - JAVA_LAB_1 (ru... ×
                   ant -f "G:\\MCA_4Th_Sem\\MCA 3RD SEM LAB\\JAVA LAB\\JAVA_LAB_1" -Dnb.internal.action.name=run run
W
                 Deleting: G:\MCA_4Th_Sem\MCA 3RD SEM LAB\JAVA_LAB\JAVA_LAB_1\build\build-jar.properties
0
                   deps-jar:
                   \label{thm:condition} \begin{tabular}{ll} $$ $$ \property file: $G:\MCA_4Th_Sem\MCA 3RD SEM LAB\JAVA LAB_JAVA_LAB_l\build\built-jar.properties $$ $$ \properties $$ $$ \properties $$ \properties $$ \property $$ \properties $$ \property $$ \properties $$ \property $$$ \property $$ \property $$$ \propert
23
                   compile:
```

run:

Enter The Number: 899999 Number is : 899999 It is is a Odd NUmber

BUILD SUCCESSFUL (total time: 8 seconds)

## P-2 Write a program to maintain data about employees of a company.

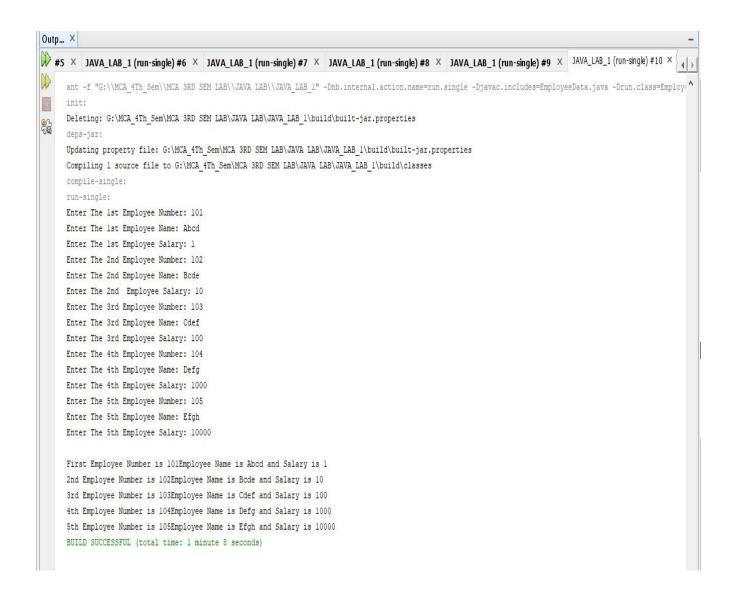
```
class Employee {
  private int empNo;
 private String empName;
 private int empSal;
 public void setData(int empNo,String empName,int empSal)
 {
   this.empName=empName;
   this.empNo=empNo;
   this.empSal=empSal;
 }
 public int getEmpNo()
 {
   return empNo;
 public String getEmpName(){
   return empName;
 }
 public int getEmpSal()
 {
   return empSal;
```

```
import java.util.Scanner;
public class EmployeeData {
public static void main(String args[])
{
    Scanner sc=new Scanner(System.in);
    Employee e1=new Employee();
    System.out.print("Enter The 1st Employee Number: ");
    int empNo=sc.nextInt();
    System.out.print("Enter The 1st Employee Name: ");
    sc.nextLine();
    String empname=sc.nextLine();
    System.out.print("Enter The 1st Employee Salary: ");
    int empSal=sc.nextInt();
     e1.setData(empNo, empname, empSal);
        Employee e2=new Employee();
    System.out.print("Enter The 2nd Employee Number: ");
    empNo=sc.nextInt();
       System.out.print("Enter The 2nd Employee Name: ");
     sc.nextLine();empname=sc.nextLine();
    System.out.print("Enter The 2nd Employee Salary: ");
     empSal=sc.nextInt();
     e2.setData(empNo, empname, empSal);
```

```
System.out.print("Enter The 3rd Employee Number: ");
empNo=sc.nextInt();
System.out.print("Enter The 3rd Employee Name: ");
 sc.nextLine();empname=sc.nextLine();
System.out.print("Enter The 3rd Employee Salary: ");
empSal=sc.nextInt();
e3.setData(empNo, empname, empSal);
   Employee e4=new Employee();
System.out.print("Enter The 4th Employee Number: ");
empNo=sc.nextInt();
System.out.print("Enter The 4th Employee Name: ");
 sc.nextLine();empname=sc.nextLine();
System.out.print("Enter The 4th Employee Salary: ");
empSal=sc.nextInt();
e4.setData(empNo, empname, empSal);
   Employee e5=new Employee();
System.out.print("Enter The 5th Employee Number: ");
empNo=sc.nextInt();
System.out.print("Enter The 5th Employee Name: ");
sc.nextLine(); empname=sc.nextLine();
System.out.print("Enter The 5th Employee Salary: ");
empSal=sc.nextInt();
```

Employee e3=new Employee();

```
e5.setData(empNo, empname, empSal);
     System.out.println("\nFirst Employee Number is
"+e1.getEmpNo()+"Employee Name is "+e1.getEmpName()+" and Salary is
"+e1.getEmpSal());
     System.out.println("2nd Employee Number is
"+e2.getEmpNo()+"Employee Name is "+e2.getEmpName()+" and Salary is
"+e2.getEmpSal());
     System.out.println("3rd Employee Number is
"+e3.getEmpNo()+"Employee Name is "+e3.getEmpName()+" and Salary is
"+e3.getEmpSal());
     System.out.println("4th Employee Number is
"+e4.getEmpNo()+"Employee Name is "+e4.getEmpName()+" and Salary is
"+e4.getEmpSal());
     System.out.println("5th Employee Number is
"+e5.getEmpNo()+"Employee Name is "+e5.getEmpName()+" and Salary is
"+e5.getEmpSal());
}
}
```



P-3 Write a program to maintain data about Books in library using array of Objects.

```
package Ques_3_updated;
class Book {
  private int bookNo;
  private String title;
  private String publication;
  private String author;
  private float price;
  public void setData(int bookNo,String title,String author,String
publication, float price)
     this.bookNo=bookNo;
     this.title=title;
    this.publication=publication;
    this.author=author;
     this.price=price;
  }
  public int getBookNo()
  {
    return bookNo;
   }
  public String getTitle()
```

```
return title;
  public String getPublication()
     return publication;
  }
  public String getAuthor()
    return author;
  }
   public float getPrice()
    return price;
package Ques_3_updated;
import java.util.Scanner;
```

}

```
class BookDetails {
  private Book [] book=new Book[5];
public void setBooks()
{
  System.out.println("Enter Book Details : ");
  Scanner sc=new Scanner(System.in);
  for(int i=0;i<5;i++)
  {
     book[i]=new Book();
    System.out.println("Enter Book Number ");
     int bookNo=sc.nextInt();
     System.out.println("Enter Book Price ");
    float price=sc.nextFloat();
    System.out.println("Enter Book Title ");
     sc.nextLine();
     String title=sc.nextLine();
     System.out.println("Enter Author ");
    sc.nextLine();
    String author=sc.nextLine();
     System.out.println("Enter Book Publication ");
    String publication=sc.nextLine();
```

```
System.out.println("\n****************************
************************************\n");
  }
}
public void printBooks()
  System.out.println("Book Details : ");
 for(int i=0;i<5;i++)
System.out.println((i+1)+"th\ BookNo\ is:"+book[i].getBookNo()+"\setminus nBookNo()+"(nBookNo()+")
Title: "+book[i].getTitle()+"\nBook Publication:
"+book[i].getPublication()+"\nBook Author: "+book[i].getAuthor()+"\nBook Author)
Price : "+book[i].getPrice());
System.out.println("\n****************************
}
public void searchBookByTitle(String title)
 int f=0;
  System.out.println("\n Search Book By Title in Process ");
  for(int i=0; i<5; i++)
```

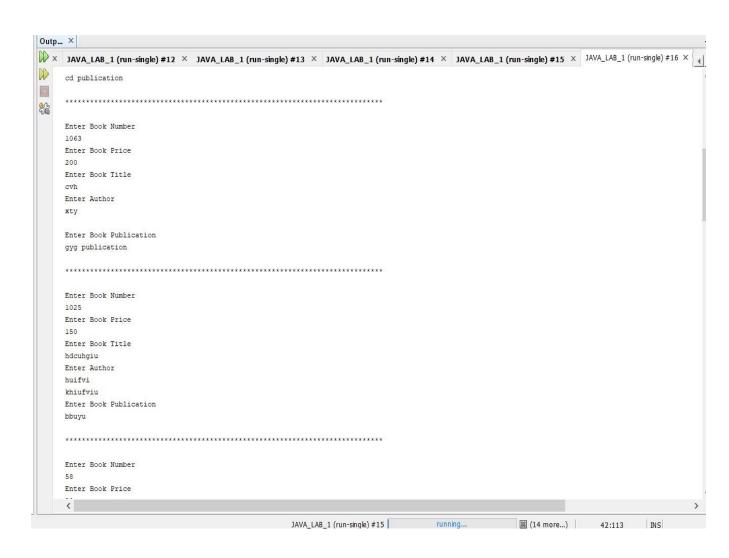
```
if(book[i].getTitle()==title)
   {
    System.out.println((i+1)+"th BookNo is:
"+book[i].getBookNo()+"\nBook\ Title: "+book[i].getTitle()+"\nBook
Publication : "+book[i].getPublication()+"\nBook Author :
"+book[i].getAuthor()+"\nBook Price : "+book[i].getPrice());
    f=1;
 if(f==0)
 {
   System.out.println("Book With this Title Does Not Exist");
  }
public void searchBookByAuthor(String author)
 int f=0;
 System.out.println("\n Search Book By Author in Process ");
 for(int i=0; i<5; i++)
**********************************\n");
   if(book[i].getAuthor()==author)
   {
```

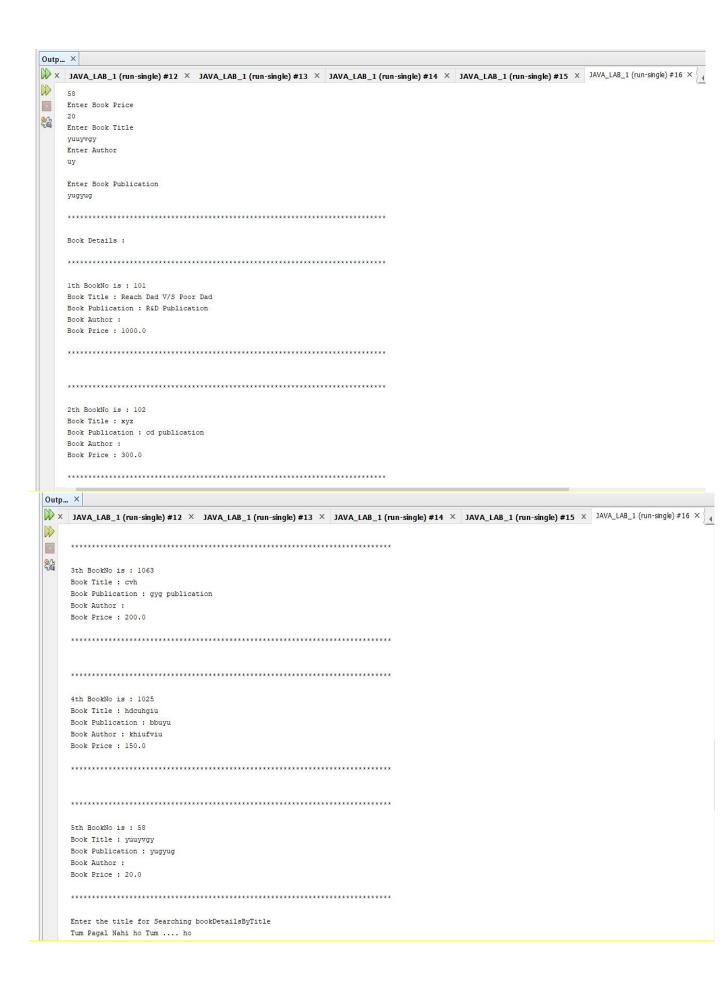
```
System.out.println((i+1)+"th BookNo is:
"+book[i].getBookNo()+"\nBook\ Title: "+book[i].getTitle()+"\nBook
Publication: "+book[i].getPublication()+"\nBook Author:
"+book[i].getAuthor()+"\nBook Price : "+book[i].getPrice());
     f=1;
     break;
     }
  }
  if(f==0)
    System.out.println("Books of given Author Does Not Exist");
  }
}
package Ques_3_updated;
import java.util.Scanner;
public class BookData {
  public static void main(String args[])
  {
      BookDetails bd=new BookDetails();
    bd.setBooks();
    bd.printBooks();
    Scanner sc=new Scanner(System.in);
    System.out.println("Enter the title for Searching bookDetailsByTitle");
```

```
sc.nextLine();String title=sc.nextLine();
bd.searchBookByTitle(title);
System.out.println("Enter the title for Searching bookDetailsByTitle ");
sc.nextLine();String author=sc.nextLine();
bd.searchBookByAuthor(author);
}
```

## **Output:**







Enter the title for Searching bookDetailsByTitle Tum Pagal Nahi ho Tum ho
Search Book By Title in Process
*************
************
************
***************************************
***********
Book With this Title Does Not Exist
Enter the title for Searching bookDetailsByTitle
Rahul Gupta
Search Book By Author in Process
*************
1th BookNo is: 101
Book Title : Reach Dad V/S Poor Dad
Book Publication : R&D Publication
Book Price: 1000.0
BOOK FILEE . 1000.0