Day -1

Task 1:

```java
import java.util.Scanner;
public class Main
{

static void checkLeap(int year)
{
if (year % 4 == 0 )
{
System.out.println(year + " is a leap
year"); } else
{
System.out.println(year + " is not a leap
year"); }
}

public static void main(String[] args)
{
Scanner in=new Scanner(System.in);
{
```

```java
System.out.print("enter the number:");
    }
    int year = in.nextInt();

    checkLeap(year);
    }
}
```

output:
enter the number:200e4

2004 is a leap year

Task 2:

```java
public class Main
{
public static void main(String[] args)
{
System.out.println("Even numbers from 1 to
100:"); for (int i = 1; i <= 100; i++)
{
if (i % 2 == 0)
{
```

```java
System.out.println(i + " ");
}
}
}
}
```

Day-2

Task 1:

```java
import java.util.Scanner;
public class Main
{
public static void main(String[] args)
{
Scanner sc= new Scanner(System.in);
System.out.println("enter the size of the array");
int n= sc.nextInt();
int[] arr = new int[n];
for(int i=0;i<n;i++)
{
System.out.print("enter the
value:"); arr[i]=sc.nextInt();
}
```

```java
for(int i=n-1;i>=0;i--)
{
System.out.println(arr[i]);
}
}
}
```

Task 2:
```java
class Main {
public static void main(String[] args)
{
String str = "Hello everyone";
String vowels = "";

String consonants = "";

for (int i = 0; i < str.length(); i++)
{
char ch = str.charAt(i);

if (ch == 'a' || ch == 'e' || ch == 'i' || ch == 'o' || ch == 'u')
{
vowels += ch;
}
```

```java
else
{
consonants += ch;
}
}

System.out.println("Vowels: " + vowels);
System.out.println("Consonants: " +
consonants); }
}
```

output: Vowels: eoeeone
Consonants: Hillary

Task 3:
REVERSE THE STRING

```java
public class Main
{
public static void main(String[] args)
{
String str1 = " I LOVE
ZOHO"; String
str[]=str1.split(" ");
for( int i=str.length-1;i>0;i--)
```

```
{

System.out.print(str[i]+ "

"); }


}
}
```

Output:

ZOHO LOVE I

Day-3
Task-1
1. BankAccount
```
package oops;
public class BankAccount {
private double balance;
public BankAccount(double initialBalance) {
this.balance = initialBalance;
}
public void deposit(double amount) {
balance += amount;
System.out.println("Deposited: " + amount);
```

```java
}
public void withdraw(double amount) {
if (balance >= amount) {
balance -= amount;
System.out.println("Withdrawn: " + amount);
} else {
System.out.println("Insucient balance");
}
}
public double getBalance() {
return balance;
}
public static void main(String[] args) {
BankAccount account = new BankAccount(2000);
account.deposit(600);
account.withdraw(300);
System.out.println("Current balance: " + account.getBalance()); }
}
```

output

Deposited: 600.0

Withdrawn: 300.0

Current balance: 2300.0

Task-2

2. Example.java

```java
package oops;
public class Example {

public int sum(int a, int b) {
return a + b;
}
public double sum(double a, double b) {
return a + b;
}
public static void main(String[] args) {
Example example = new Example();
System.out.println("Sum of integers: " + example.sum(10, 20));
System.out.println("Sum of doubles: " + example.sum(10.5,
20.7));
}
}
```

output
Sum of integers: 30
Sum of doubles: 31.2
Sum of integers: 30
Sum of doubles: 31.2
Task-3

3. StudentManagementSystem

```java
package oops;
import java.util.Scanner;
class Student {
String name;
int marks;
public Student(String name) {
this.name = name;
}
public void assignMarks(int marks) {
this.marks = marks;
}
public void displayResults() {
System.out.println("Name: " + name);
System.out.println("Marks: " + marks);
if (marks >= 60) {
System.out.println("Result: Pass");
} else {

System.out.println("Result: Fail");
}
}
}
```

```java
public class StudentManagementSystem {
public static void main(String[] args) {
Scanner scanner = new Scanner(System.in);
System.out.print("Enter student name: ");
String name = scanner.nextLine();
Student student = new Student(name);
System.out.print("Enter marks: "); int
marks = scanner.nextInt();
student.assignMarks(marks);
student.displayResults();
}
}
```

output

Enter student name: sri

Enter marks: 90

Name: sri

Marks: 90

Result: Pass

Task-4

4. Employee

```java
package oops;
class Person {
String name;
```

```java
int age;
public Person(String name, int age) {
this.name = name;
this.age = age;
}
}
class Employee extends Person {
double salary;

int hoursWorked;
double hourlyRate;
public Employee(String name, int age, double hourlyRate) {
super(name, age);
this.hourlyRate = hourlyRate;
}
public void calculateSalary(int hoursWorked) {
this.hoursWorked = hoursWorked;
salary = hoursWorked * hourlyRate;
System.out.println("Salary: " + salary);
}
public static void main(String[] args) {
Employee employee = new Employee("John", 30, 20.0);
employee.calculateSalary(40);
}
```

}

output

Salary: 800.0

 Day -7

Task-1

mysql> use mysql;

Database changed

mysql> CREATE TABLE Student (

    ->   student_id INT PRIMARY KEY,

    ->   first_name VARCHAR(50),

    ->   last_name VARCHAR(50),

    ->   date_of_birth DATE,

    ->   email VARCHAR(100) UNIQUE

    ->);

Query OK, 0 rows affected (0.02 sec)

mysql> CREATE TABLE Course (

    ->   course_id INT PRIMARY KEY,

    ->   course_name VARCHAR(100),

    ->   course_code VARCHAR(20) UNIQUE,

    ->   credits INT

    ->);

Query OK, 0 rows affected (0.01 sec)

Task-2

```
mysql> INSERT INTO Student (student_id, first_name, last_name,
date_of_birth, email) VALUES
    -> (1, 'Alice', 'Johnson', '2002-04-15', 'alice.johnson@example.com'),
    -> (2, 'Bob', 'Smith', '2001-11-20', 'bob.smith@example.com'),
    -> (3, 'Charlie', 'Lee', '2003-01-05', 'charlie.lee@example.com'),
    -> (4, 'Diana', 'Garcia', '2000-07-12', 'diana.garcia@example.com'),
    -> (5, 'Ethan', 'Kumar', '2002-09-30', 'ethan.kumar@example.com');
Query OK, 5 rows affected (0.01 sec)
Records: 5  Duplicates: 0  Warnings: 0


mysql> desc Student;
+--------------+--------------+------+-----+---------+-------+
| Field        | Type         | Null | Key | Default | Extra |
+--------------+--------------+------+-----+---------+-------+
| student_id   | int(11)      | NO   | PRI | NULL    |       |
| first_name   | varchar(50)  | YES  |     | NULL    |       |
| last_name    | varchar(50)  | YES  |     | NULL    |       |
| date_of_birth| date         | YES  |     | NULL    |       |
| email        | varchar(100) | YES  | UNI | NULL    |       |
+--------------+--------------+------+-----+---------+-------+
5 rows in set (0.01 sec)


mysql> select * from Student;
+------------+------------+-----------+--------------+-------------------------+
| student_id | first_name | last_name | date_of_birth | email                  |
+------------+------------+-----------+--------------+-------------------------+
```

1	Alice	Johnson	2002-04-15	alice.johnson@example.com
2	Bob	Smith	2001-11-20	bob.smith@example.com
3	Charlie	Lee	2003-01-05	charlie.lee@example.com
4	Diana	Garcia	2000-07-12	diana.garcia@example.com
5	Ethan	Kumar	2002-09-30	ethan.kumar@example.com
+-----------+-----------+----------+--------------+-------------------------+
5 rows in set (0.00 sec)

mysql> INSERT INTO Course (course_id, course_name, course_code, credits) VALUES
    -> (01, 'cs', 'cs1', 2),
    -> (02, 'ct', 'ct1', 2),
    -> (03, 'it', 'it1', 2),
    -> (04, 'cs', 'cs3', 2);
Query OK, 4 rows affected (0.00 sec)
Records: 4 Duplicates: 0 Warnings: 0

mysql> select * from Course;
+-----------+-------------+-------------+---------+
| course_id | course_name | course_code | credits |
+-----------+-------------+-------------+---------+
1	cs	cs1	2
2	ct	ct1	2
3	it	it1	2
4	cs	cs3	2
+-----------+-------------+-------------+---------+

4 rows in set (0.00 sec)

mysql> INSERT INTO Course (course_id, course_name, course_code, credits) VALUES
    -> (05, 'ct', 'ct2', 2);
Query OK, 1 row affected (0.00 sec)

mysql> select * from Course;
+-----------+-------------+-------------+---------+
| course_id | course_name | course_code | credits |
+-----------+-------------+-------------+---------+
1	cs	cs1	2
2	ct	ct1	2
3	it	it1	2
4	cs	cs3	2
5	ct	ct2	2
+-----------+-------------+-------------+---------+
5 rows in set (0.00 sec)

mysql> ALTER TABLE Course
    -> ADD fee DECIMAL(10, 2);
Query OK, 0 rows affected (0.02 sec)
Records: 0 Duplicates: 0 Warnings: 0

mysql> select * from Course;

```
+-----------+-------------+-------------+---------+------+
| course_id | course_name | course_code | credits | fee  |
+-----------+-------------+-------------+---------+------+
|         1 | cs          | cs1         |       2 | NULL |
|         2 | ct          | ct1         |       2 | NULL |
|         3 | it          | it1         |       2 | NULL |
|         4 | cs          | cs3         |       2 | NULL |
|         5 | ct          | ct2         |       2 | NULL |
+-----------+-------------+-------------+---------+------+
5 rows in set (0.00 sec)
```

Task-3

```
mysql> UPDATE Course
    -> SET fee = 1200.00
    -> WHERE course_code = 'CS101';
Query OK, 0 rows affected (0.01 sec)
Rows matched: 0  Changed: 0  Warnings: 0


mysql> select * from Course;
+-----------+-------------+-------------+---------+------+
| course_id | course_name | course_code | credits | fee  |
+-----------+-------------+-------------+---------+------+
|         1 | cs          | cs1         |       2 | NULL |
|         2 | ct          | ct1         |       2 | NULL |
|         3 | it          | it1         |       2 | NULL |
|         4 | cs          | cs3         |       2 | NULL |
|         5 | ct          | ct2         |       2 | NULL |
```

```
+-----------+-------------+-------------+---------+------+
```
5 rows in set (0.00 sec)

mysql> UPDATE Course
    -> SET fee = 1200.00
    -> WHERE course_code = 'cs1';
Query OK, 1 row affected (0.00 sec)
Rows matched: 1 Changed: 1 Warnings: 0

Task-4

mysql> select * from Course;

course_id	course_name	course_code	credits	fee
1	cs	cs1	2	1200.00
2	ct	ct1	2	NULL
3	it	it1	2	NULL
4	cs	cs3	2	NULL
5	ct	ct2	2	NULL

5 rows in set (0.00 sec)

mysql> UPDATE Course
    -> SET fee = 1300.00
    -> WHERE course_code = 'ct1';
Query OK, 1 row affected (0.00 sec)

Rows matched: 1 Changed: 1 Warnings: 0

mysql> UPDATE Course
    -> SET fee = 1100.00
    -> WHERE course_code = 'it1';
Query OK, 1 row affected (0.00 sec)
Rows matched: 1 Changed: 1 Warnings: 0

mysql> UPDATE Course
    -> SET fee = 1400.00
    -> WHERE course_code = 'cs3';
Query OK, 1 row affected (0.00 sec)
Rows matched: 1 Changed: 1 Warnings: 0

mysql> UPDATE Course
    -> SET fee = 1100.00
    -> WHERE course_code = 'ct2';
Query OK, 1 row affected (0.00 sec)
Rows matched: 1 Changed: 1 Warnings: 0

mysql> select * from Course;
+-----------+-------------+-------------+---------+---------+
| course_id | course_name | course_code | credits | fee |
+-----------+-------------+-------------+---------+---------+
| 1 | cs | cs1 | 2 | 1200.00 |

```
|       2 | ct      | ct1    |     2 | 1300.00 |
|       3 | it      | it1    |     2 | 1100.00 |
|       4 | cs      | cs3    |     2 | 1400.00 |
|       5 | ct      | ct2    |     2 | 1100.00 |
+-----------+-------------+-------------+---------+---------+
```

5 rows in set (0.00 sec)