

DATE: 28.01.2025

### Shell Script

#### Aim:

To write a Shell script to check whether a given year is a leap year or not using conditional statements.

---

#### Algorithm:

1. Start the script.
  2. Prompt the user to enter a year.
  3. Read the input year.
  4. Check the leap year condition:
    - A year is a leap year if it is divisible by 4 **and** not divisible by 100, **or** divisible by 400.
  5. Display whether it is a leap year or not.
  6. End the script.
- 

#### Program: (leap.sh)

```
#!/bin/bash
```

```
# Script to check leap year
```

```
echo "Enter year:"
```

```
read year
```

```
if [ $((year % 4)) -eq 0 ]; then if [ $((year % 100)) -ne 0 ] || [ $((year % 400)) -eq 0 ]; then echo "Leap year"
```

```
else echo "Not a leap  
year"
```

```
fi
```

```
else
```

CS23431-OPERATING SYSTEMS

RollNo:231901033

```
echo "Not a leap year"
```

```
fi
```

---

### Sample Input and Output:

```
[REC@localhost ~]$ sh leap.sh
```

Enter year:

12

Leap year

---

### Result:

The Shell script to test whether the given year is a leap year or not was successfully implemented and executed, and the output was verified.