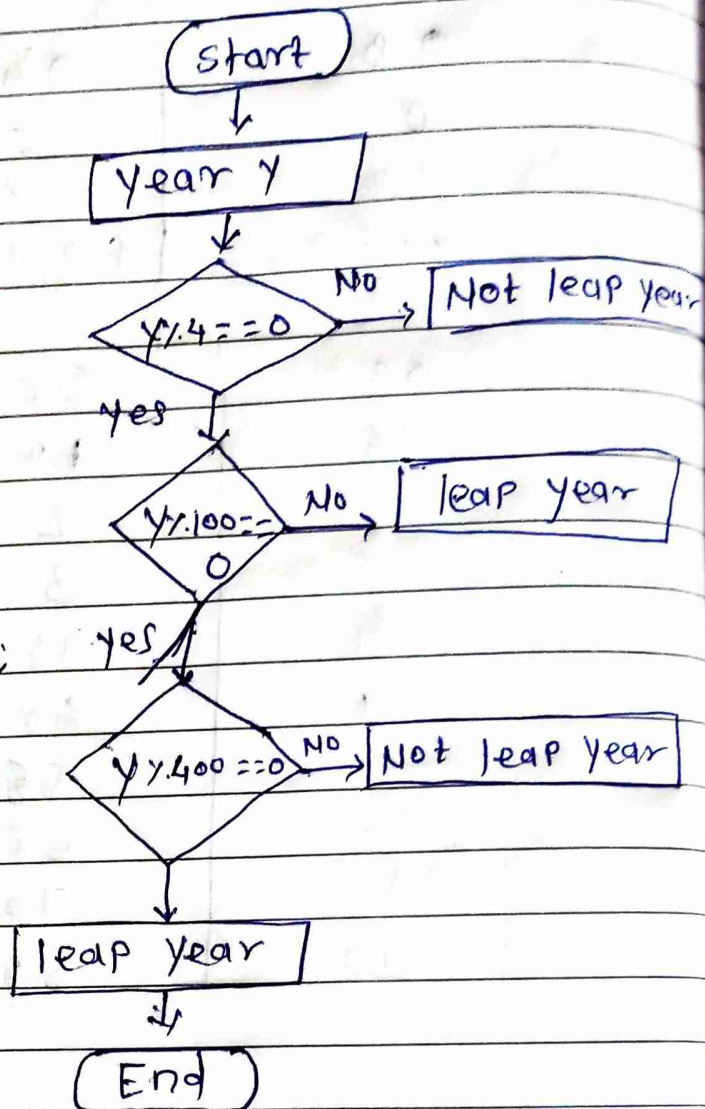


1) Check if a year is leap year or not.

```

int year = 2000;
if (year % 400 == 0) {
    print (leap year);
}
else if (year % 100 == 0) {
    System.out.println (not
        leap year);
}
else if (year % 4 == 0) {
    System.out.println (leap year);
}
else {
    System.out.println (not leap
        year);
}
}
}
}

```



2) Write algorithm to print all odd numbers backward from 99 to 1

```

1) Start
2) For 99 to 1
    if (i % 2 != 0)
        print i
3) End

```

3) Java program to Calculate Distance betⁿ Two points.

```
import java.lang.Math.*;
class DistanceBwpoint
{
    public static void main (String arg [])
    {
        int x1, x2, y1, y2;
        double dis;
        x1 = 1; y1 = 1, x2 = 4, y2 = 4;
        dis = Math.sqrt ((x2 - x1) * (x2 - x1) + (y2 - y1) * (y2 - y1));
        System.out.println (" distance between " + dis);
    }
}
```

4) Write algorithm to print sum of even and odd digits, considering 10 numbers are taken from user.

- 1) Start
- 2) Input N
- 3) SumEven = 0
- 4) Sumodd = 0
- 5) ~~Sum~~ i = 1
- 6) if (i <= N)
 if (i % 2 == 0)
 SumEven = SumEven + i;
 else
 Sumodd = Sumodd + i;
- 7) print (Sum of even numbers);
- 8) print (Sum of odd numbers).
- 9) End.

5) Calculate product of digit Number

- 1) Start
- 2) Input ll, ul .
- 3) Set $num = ll$.
- 4) Set $product = 1$
- 5) Set $product = product * ll$
- 6) Set $product = num + 1$
- 7) if ($product \leq ul$)
 goto step 5
 else
 print ($product$)
- 8) End.

6) ~~map~~ to print first x terms of Series $3N+2$ which are not multiples of 4

- 1) Start
- 2) Read n
- 3) Set $Count = 0$
- 4) for $i = 1$ to n
 int $a = 3*i + 2$
 if ($a \% 4 \neq 0$)
 print ~~Count~~ (a)
 Count ++
- 5) End.

7) write program to find Compound Interest
provided principle, time and ROI are taken by user

- 1) Start
- 2) Read Rate, R.
- 3) Read principle P
- 4) Read time T
- 5) Read Interest
- 6) $\text{Interest} = (P \times R \times T) / 100$
- 7) print (interest)
- 8) End