

# DAY-19

06 July 2023 15:49

## DO-WHILE LOOP

- WRITE A PROGRAM TO FIND THE GIVEN NUMBER IS ARMSTRONG NUMBER OR NOT
  - SUM OF CUBES OF EACH DIGIT SHOULD BE EQUAL TO THE NUMBER ITSELF

153

$1*1*1 = 1$

$1+125+27 = 153$

$5*5*5 = 125$

$3*3*3 = 27$

$125+27 = 152 + 1 = 153$

153

P = 0

N = 1

Rem = n%10

P = (p) + (rem\*rem\*rem)

n = n/10 ---> 15/10 = 1

r=num%10	Num=num/10	p=(rem*rem*rem)+r
3	15	27
5	1	152
1	0	153

While(n>0)

class Test1

{

public static void main(String[] args)

{

int n = 152;

int p = 0;

int rem;

int temp = n;

do

{

/\* function to calculate the sum of individual digits \*/

rem = n%10;

p = (p) + (rem\*rem\*rem);

n = n/10;

}

while (n>0);

```
        if (temp==p)
        {
            System.out.println("yes, it is an amstrong number");
        }
        else
        {
            System.out.println("no, it is not an amstrong number");
        }

    }
}
```

CALCULATOR

SWITCH STATEMENT