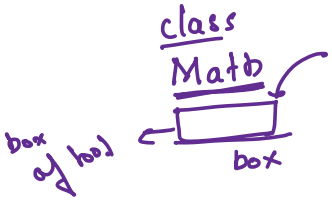
Inbuilt Math functions

$a^b \rightarrow 2^3 \rightarrow 8 \rightarrow 2 \times 2 \times 2$

$\rightarrow a \times a \times a \ldots$ b times.



Math.pow(a, b) → a^b → power of a^b

9^{10} → Math.pow(9, 10) —

10^{10} → Math.pow(10, 10).

2^3 → Math.pow(2, 3) → 8 o/p.

→

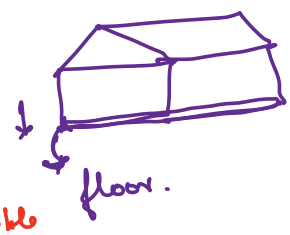
5.8 → 5.0

4.1 → 4.0

4.5 → 4.0

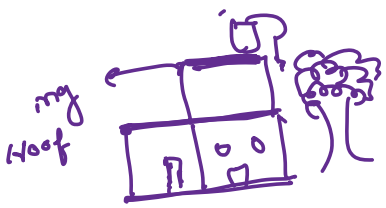
4.9 → 4.0

6 - int
7 - int
8
9
float / double



→ Math.floor(num); 2 o/p later

Math.floor(-5.5);



→

5.9 → 6

5.1 → 6. 2 double

Math.ceil(num);

Math.ceil(5.1) → 6

Math.ceil(9.5) → 10.

Math.ceil(-5.5) →

→ Math.round(5.2) → 5.

Math.round(5.6) → 6

Math.round(5.5) →

if value below .5 → floor.

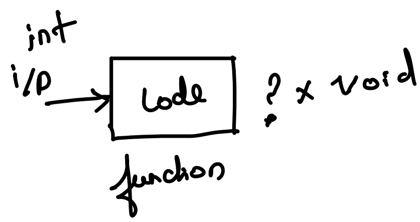
if value is above .5 → ceil.

Q → Given n, check wether n is even or odd. using functions

1) print "Even" or "Odd"

2) return true if even and return false if it odd.

1) Print Even or Odd:




```
static returnDataType functionName(inputDataType inputName){
    ______
    ______
    ______
    ______
    ______

    return ______;
}
```

① 45 % 2 == 0 ✗

```
void printEvenOdd(int n) {        n = 45
    if (n % 2 == 0) {             F
        Sop("Even");
    } else {
        Sop("Odd");
    }
}
```

n = 45

② ✓

```
psv main(   ) {                   n = 45.
    int n = sc.nextInt(); // 45
    printEvenOdd(n);              → 45
}
```

calling method

main

O/P → ODD

ii) which return true → Even

return false → odd

i/p (int) → code (function) → o/p (boolean)

```
static boolean isEven(int num) {           420
    if (num % 2 == 0) {                    420 % 2 == 0    num = 420
        return true;                       T
    } else {
        return false;
    }
}
```

```
public static void main(String args[]) {
    int n = sc.nextInt()  // 420          n = 420
    isEven(n)   // i/p should match.      420
}
```

n = 420

true

① error

② true !

③ None.

Quiz2

```
static int sum(int a, int b){
    return a+b;
    Sopln("Hey");   // Never get executed.
}
psum(){
    ...
}
```

Ans → C.E

Quiz1

```
static int sum(int a, int b){
    return a+b;
}
psum(){
    int a=10, b=5;
    int x=100, y=200;
    Sopln(sum(x,y));
}
```

100 → a, 200 → b

a = 100; b = 200;

100 + 200 → 300

int sum = a+b; → 300

a=10, b=5

x=100 y=200

sum(100, 200); → 300

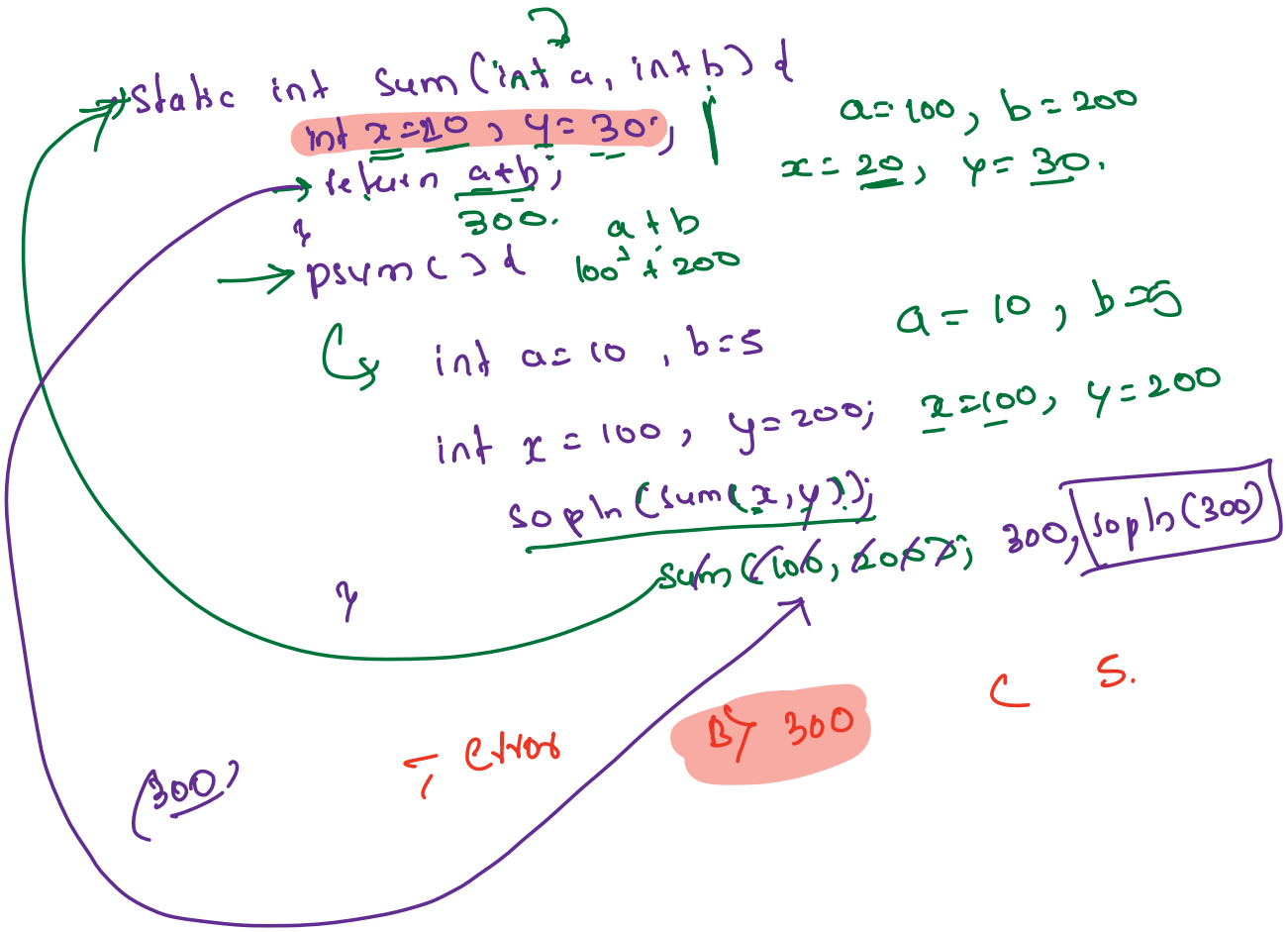
Sopln(300)

300

A) Error

B) 300

C) 15.



Doubt session

```
static void sum() {

}

static void sum() {

}
```

double = 0.30000000004 0.2 + 0.1 → 0.3

float sum = 0.2 + 0.1

A → average num of cases daily
B → num of new cases daily
C → current active case of corona.

A → → 5 recover — 5

B → new cases. → 3

C → 1 — 1

mon — 1 + ↓ end — 3 — 5 ← 4 ↓ 0

1 → 3

1+3 ⇒ 4

4 < 5 — 0.

A = 4
B = 3
C = 2

mon — 2 ↓ 3

(2+3) = 5.

5 — 4

1

2

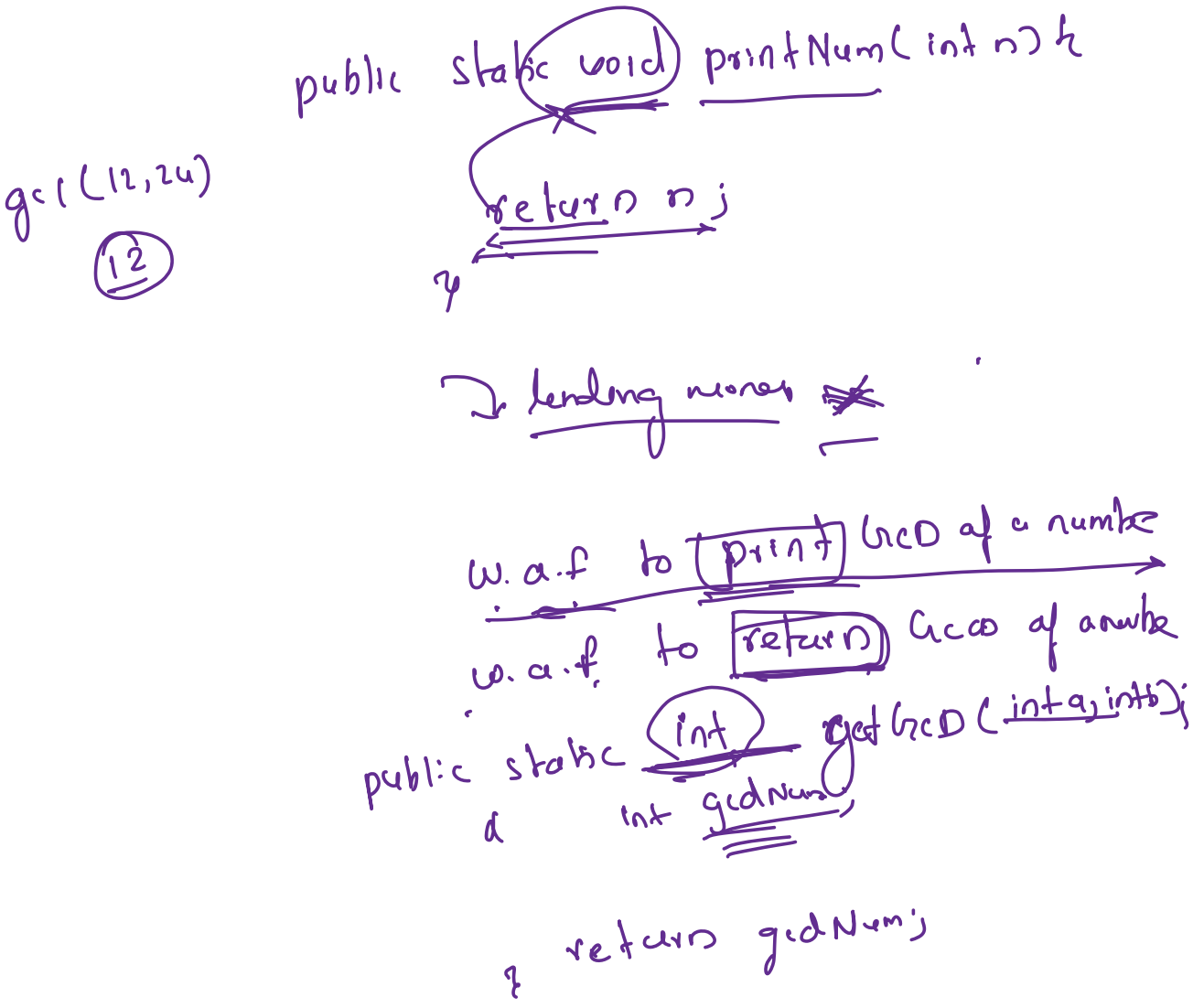
5
3
1

5 − 9 — 1

(1+3) — 4

9+5 — 1

−1 < 0



https://www.interviewbit.com/snippet/a549ebfb68add94f083c/