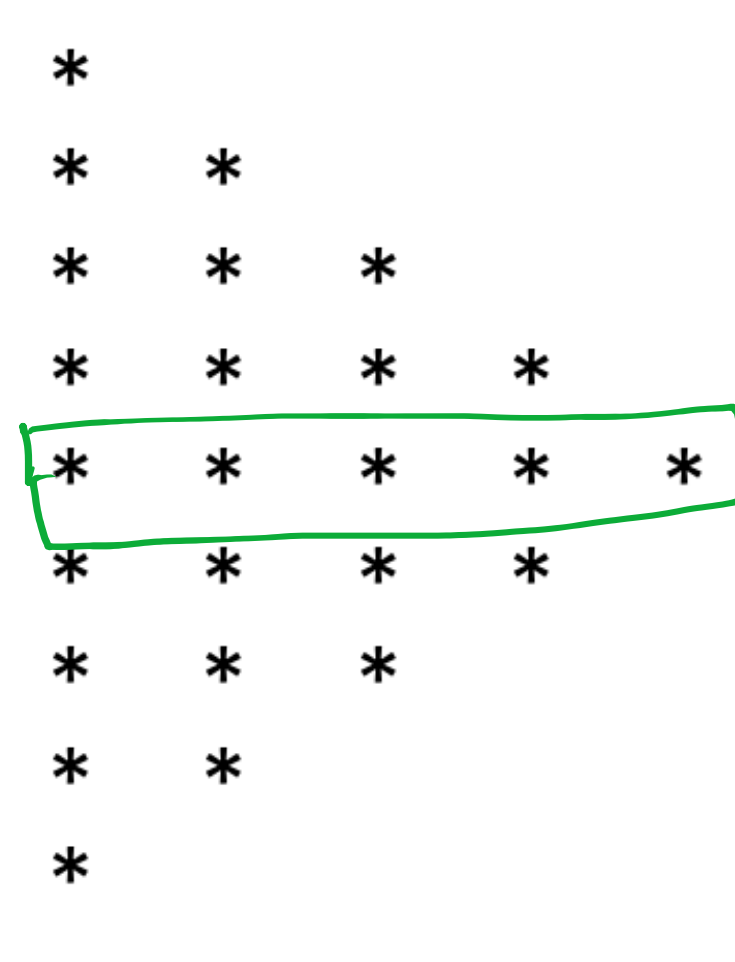


548
66 548 54

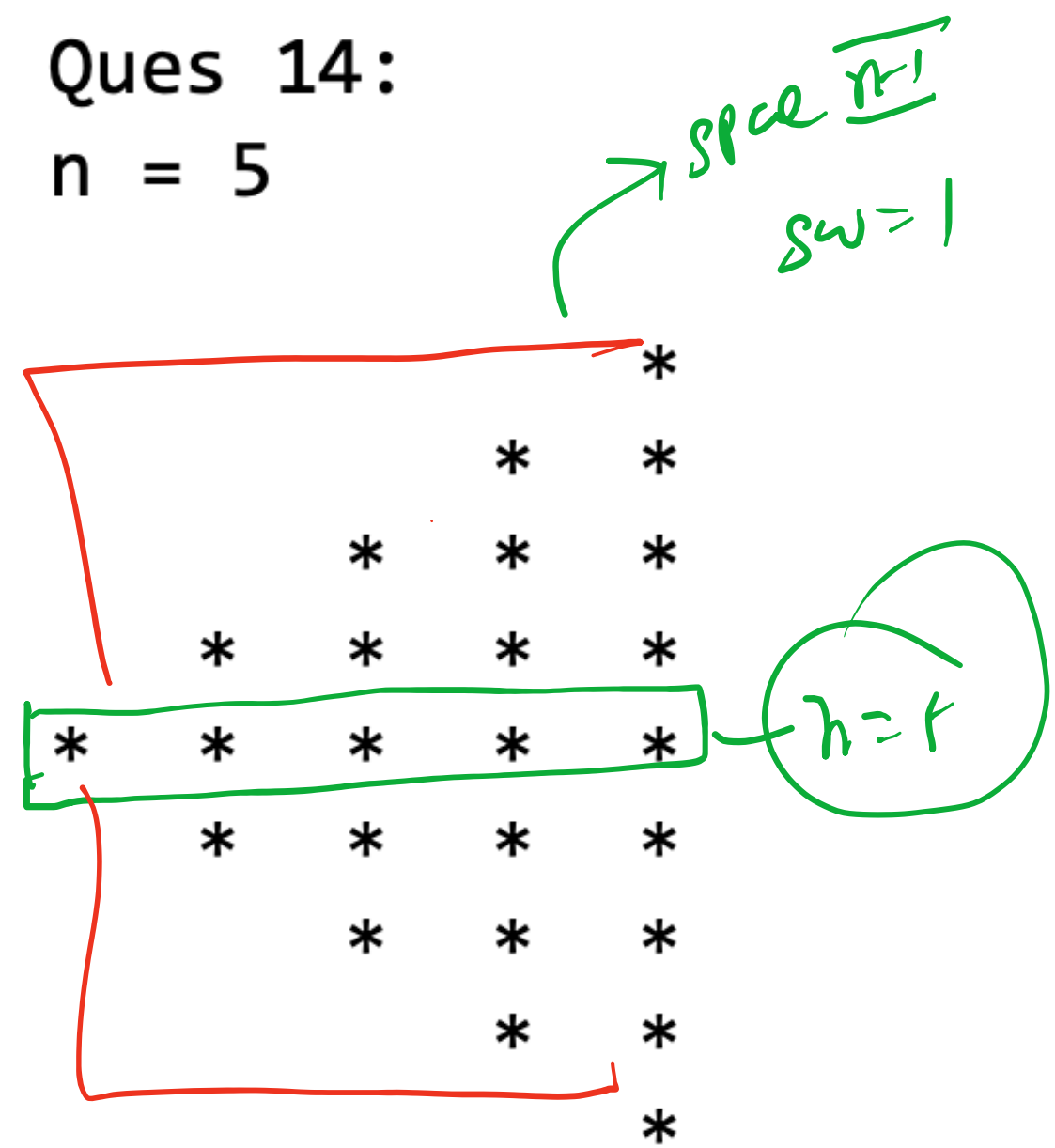
Ques 13:

n = 5

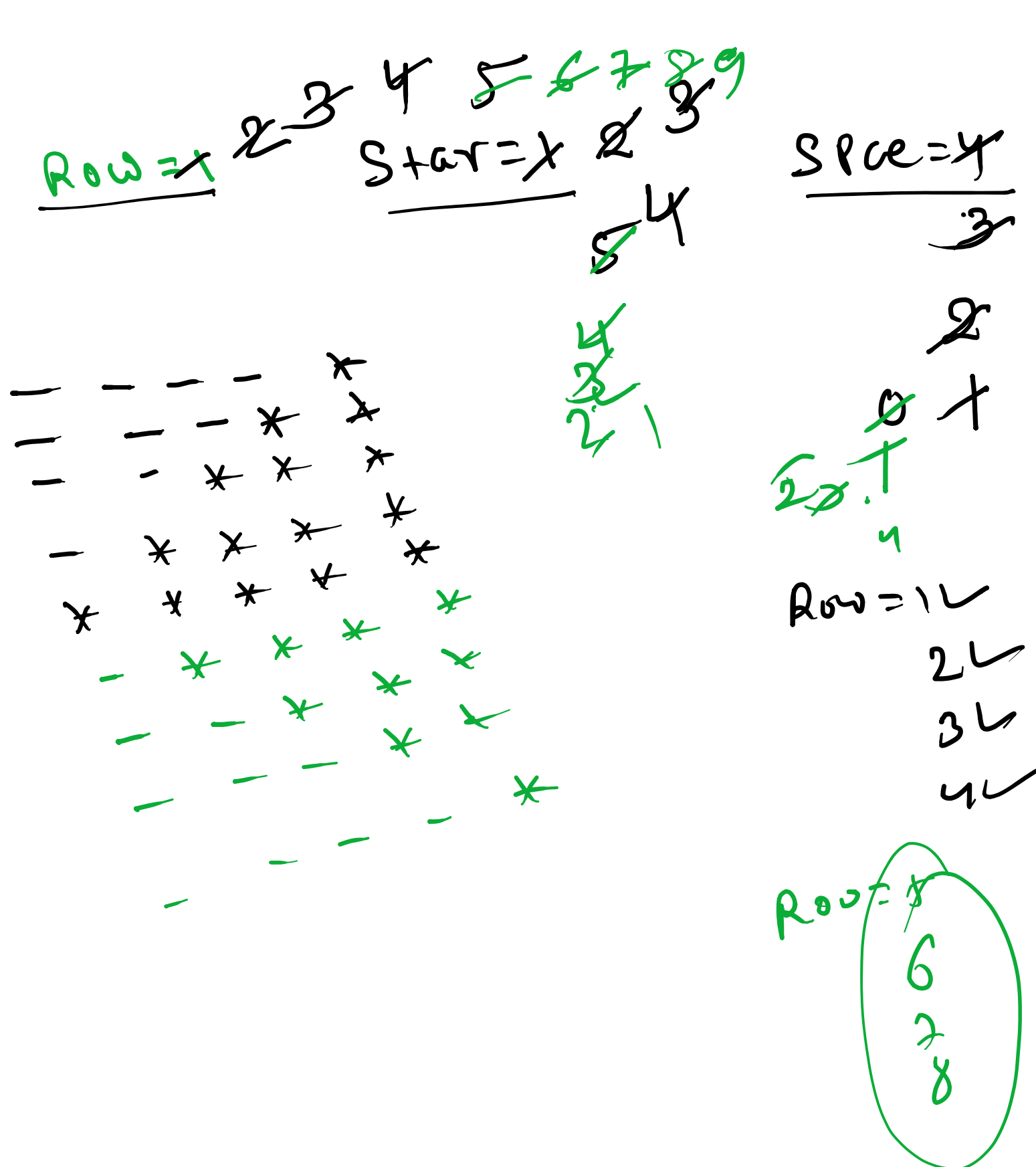


Ques 14:

n = 5

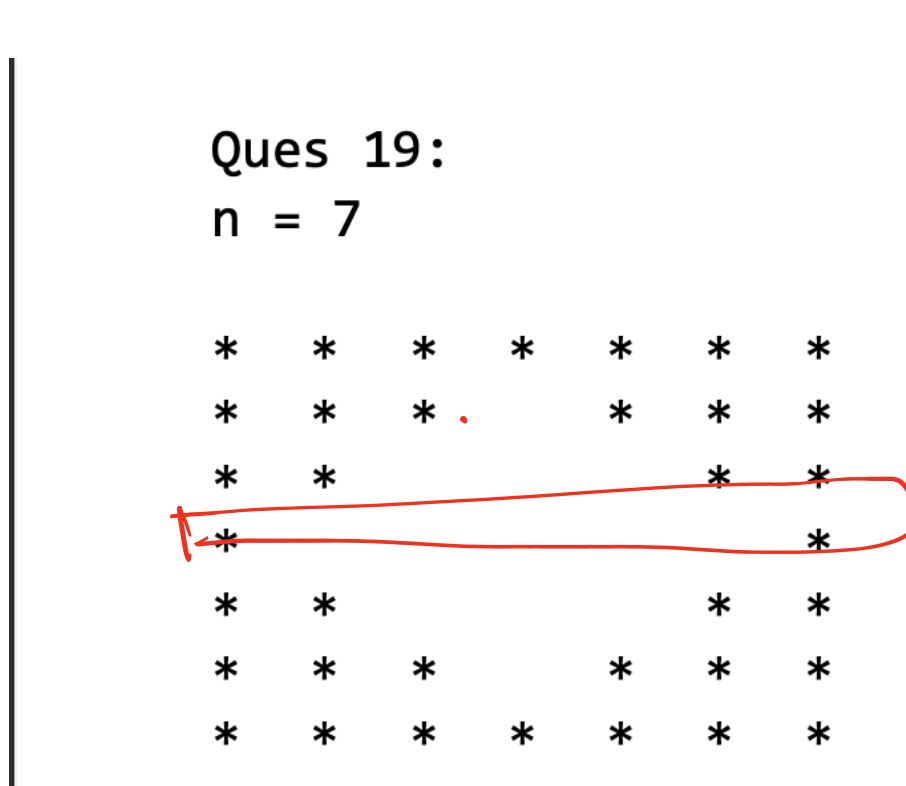
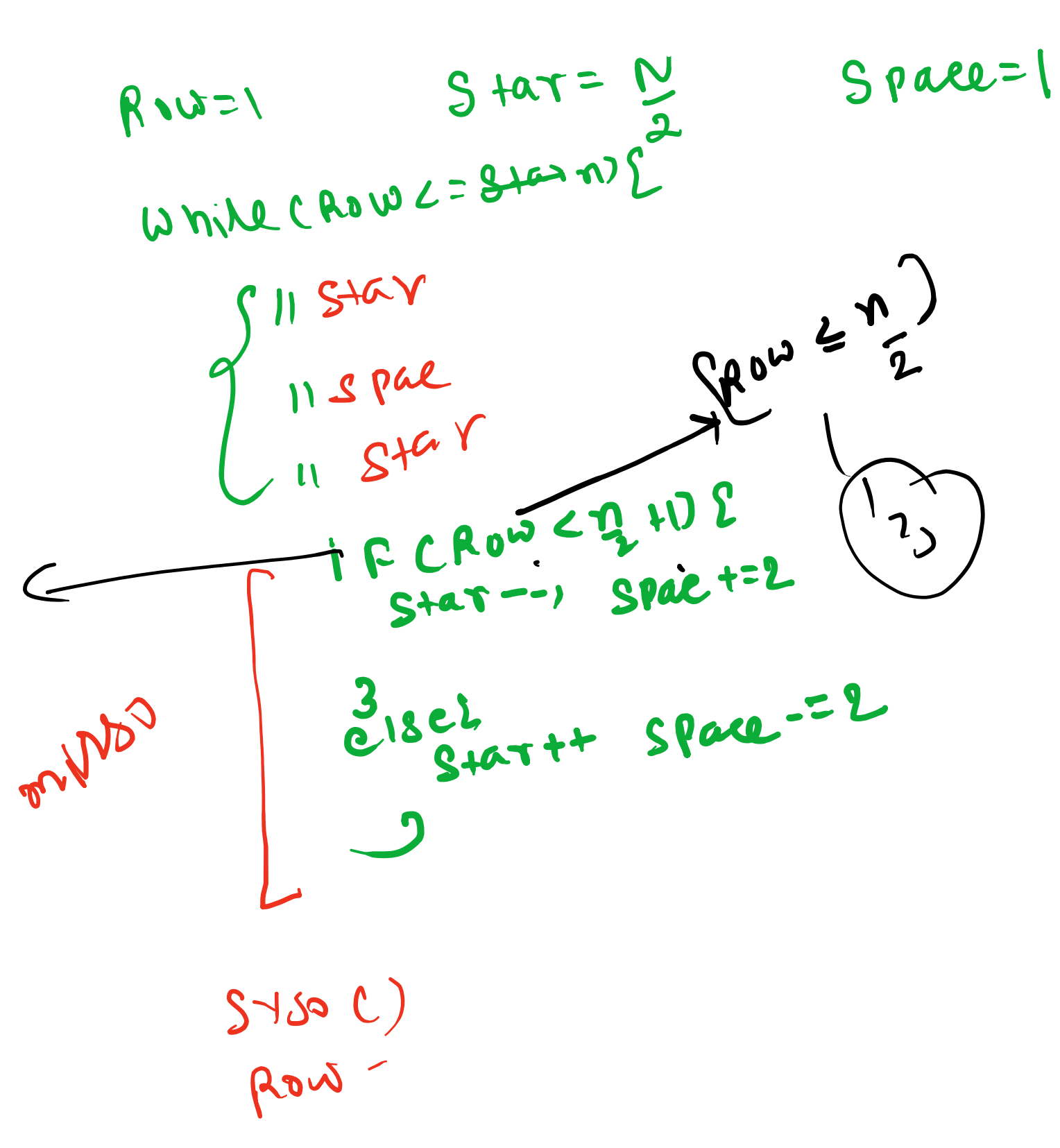
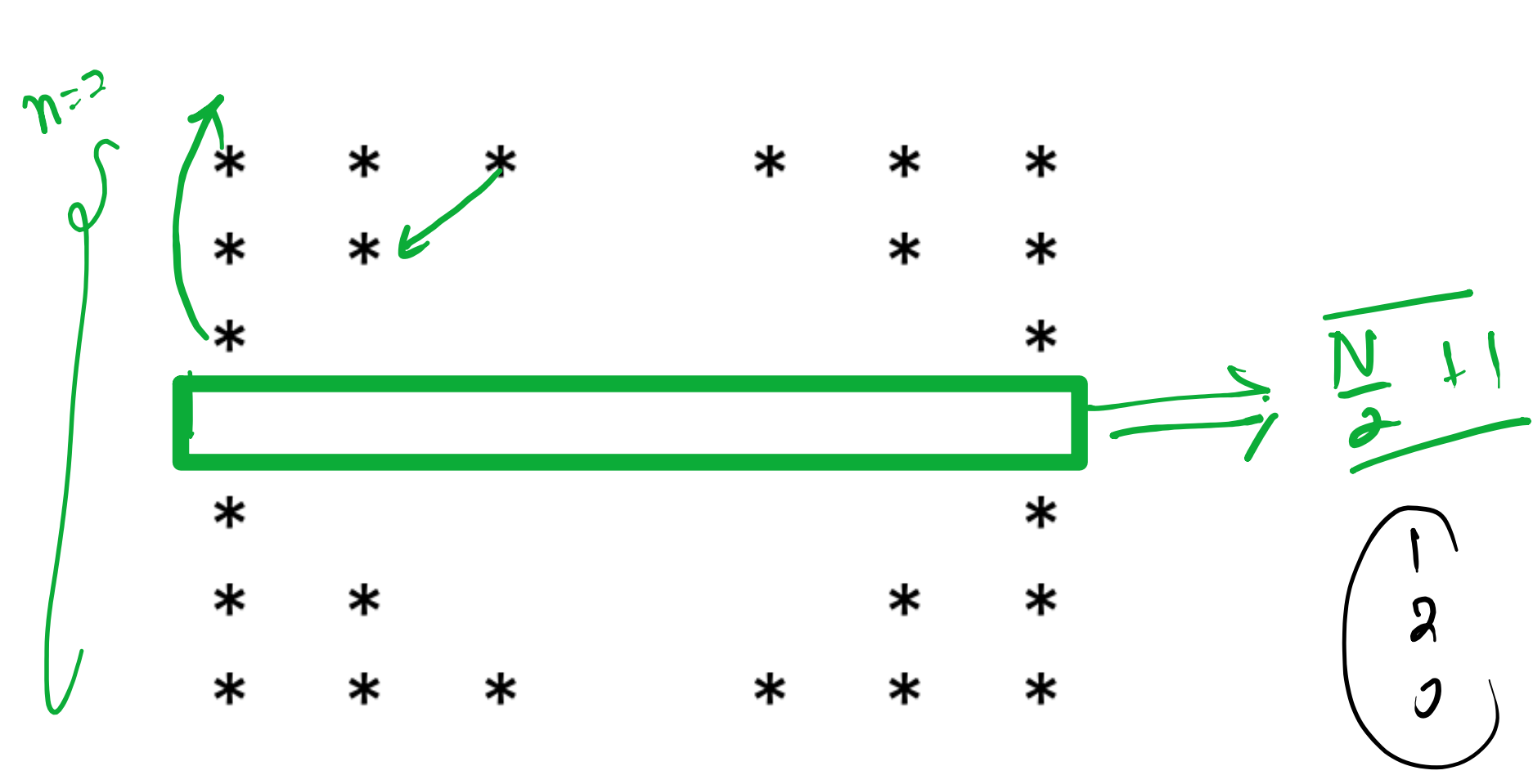
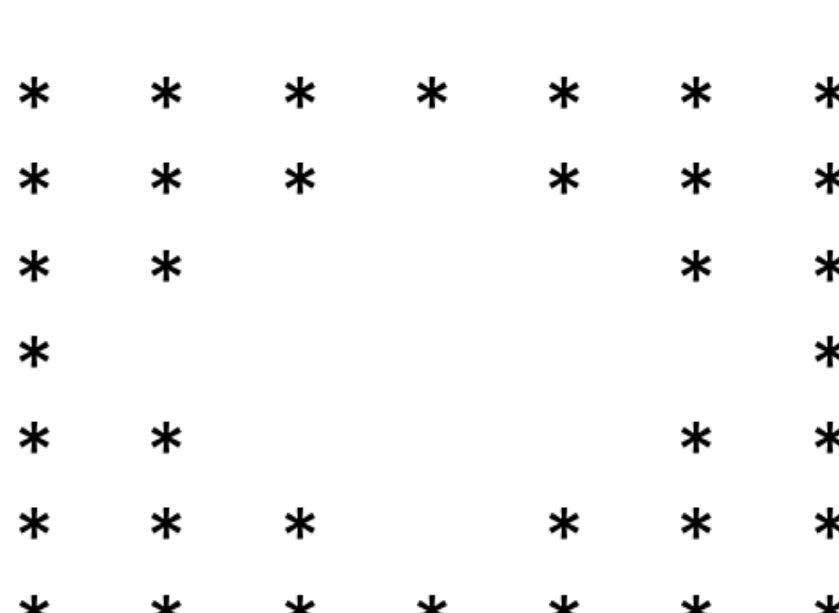


```
public static void main(String[] args) {
    // TODO Auto-generated method stub
    int n = 5;
    int star = 1;
    int row = 1;
    int space = n - 1;
    while (row <= 2*n-1) {
        // space
        int i = 1;
        while (i <= space) {
            System.out.print(" ");
            i++;
        }
        // star
        int j = 1;
        while (j <= star) {
            System.out.print("* ");
            j++;
        }
        //Mirror
        space--;
        star++;
        // next line prep
        System.out.println();
        row++;
    }
}
```



Ques 19:

n = 7

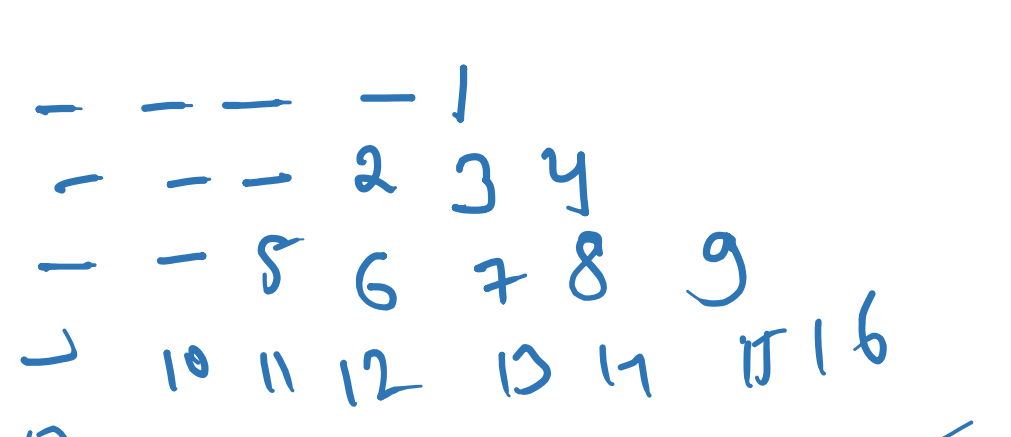
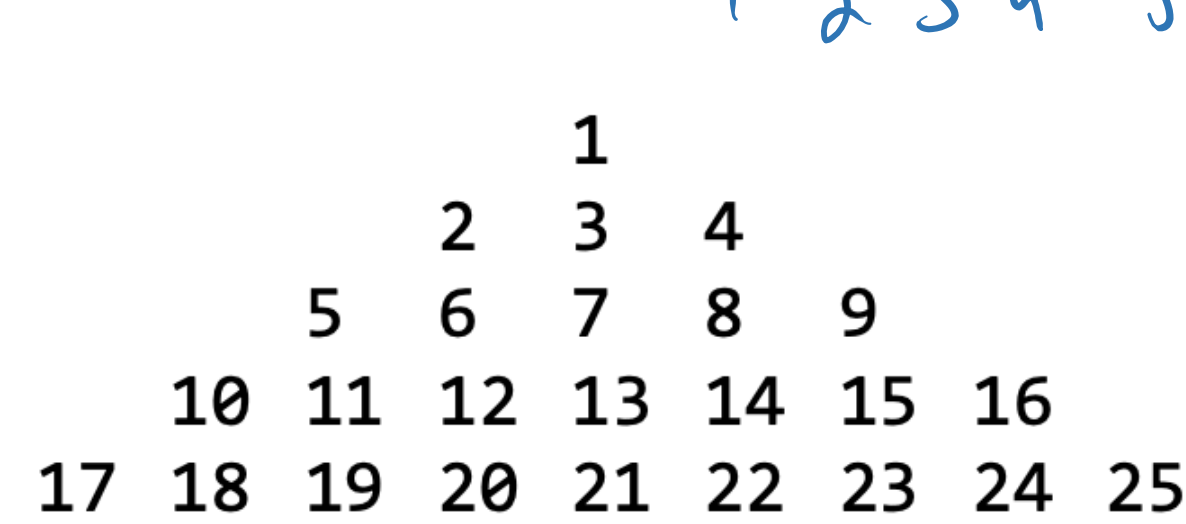


Star = $\frac{N}{2} + 1$
Space = -1

```
public static void main(String[] args) {
    // TODO Auto-generated method stub
    int n = 5;
    int star = 1;
    int row = 1;
    int space = n - 1;
    int val = 1;
    while (row <= n) {
        // space
        int i = 1;
        while (i <= space) {
            System.out.print(" ");
            i++;
        }
        // star
        int j = 1;
        while (j <= star) {
            System.out.print(val + " ");
            val++;
            j++;
        }
        // next line prep
        System.out.println();
        space--;
        star += 2;
        row++;
    }
}
```

Ques 25:

n = 5

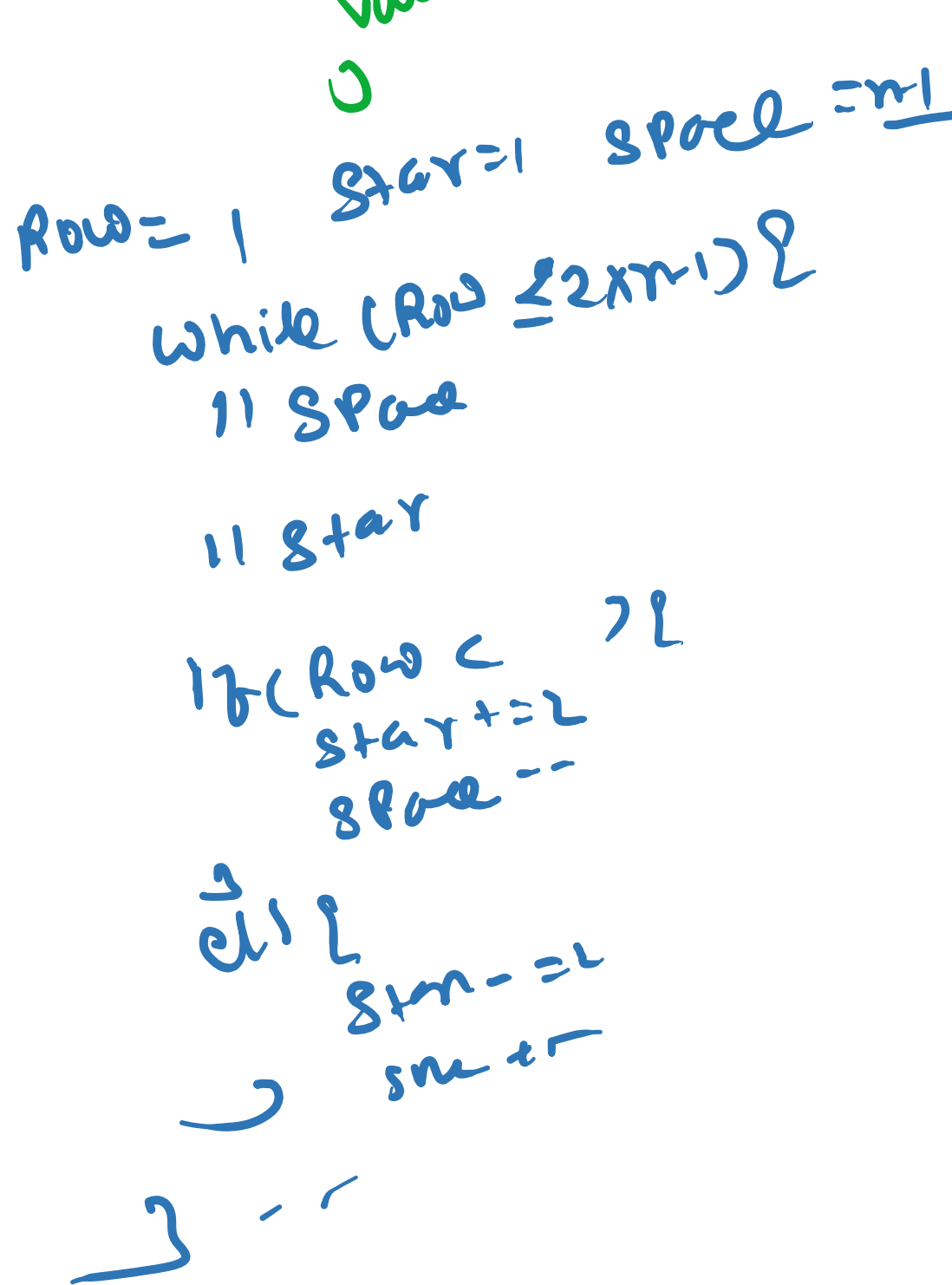


Ques 27:

n = 5



```
// star
int j = 1;
int val = 1;
while (j <= star) {
    System.out.print(val + " ");
    val++;
    j++;
}
```



```
public static void main(String[] args) {
    // TODO Auto-generated method stub
    Scanner sc = new Scanner(System.in);
    int n = sc.nextInt();
    int row = 1;
    int star = 1;
    int space = n - 1;
    int val = 1;
    while (row <= 2 * n - 1) {
        int i = 1;
        while (i <= space) {
            System.out.print(" ");
            i++;
        }
        int j = 1;
        int p = val;
        while (j <= star) {
            System.out.print(p + " ");
            if (j <= star / 2) {
                p++;
            } else {
                p--;
            }
            j++;
        }
        if (row < n) {
            star += 2;
            space--;
            val++;
        } else {
            star -= 2;
            space++;
            val--;
        }
        // Next line Prep
        System.out.println();
        row++;
    }
}
```

