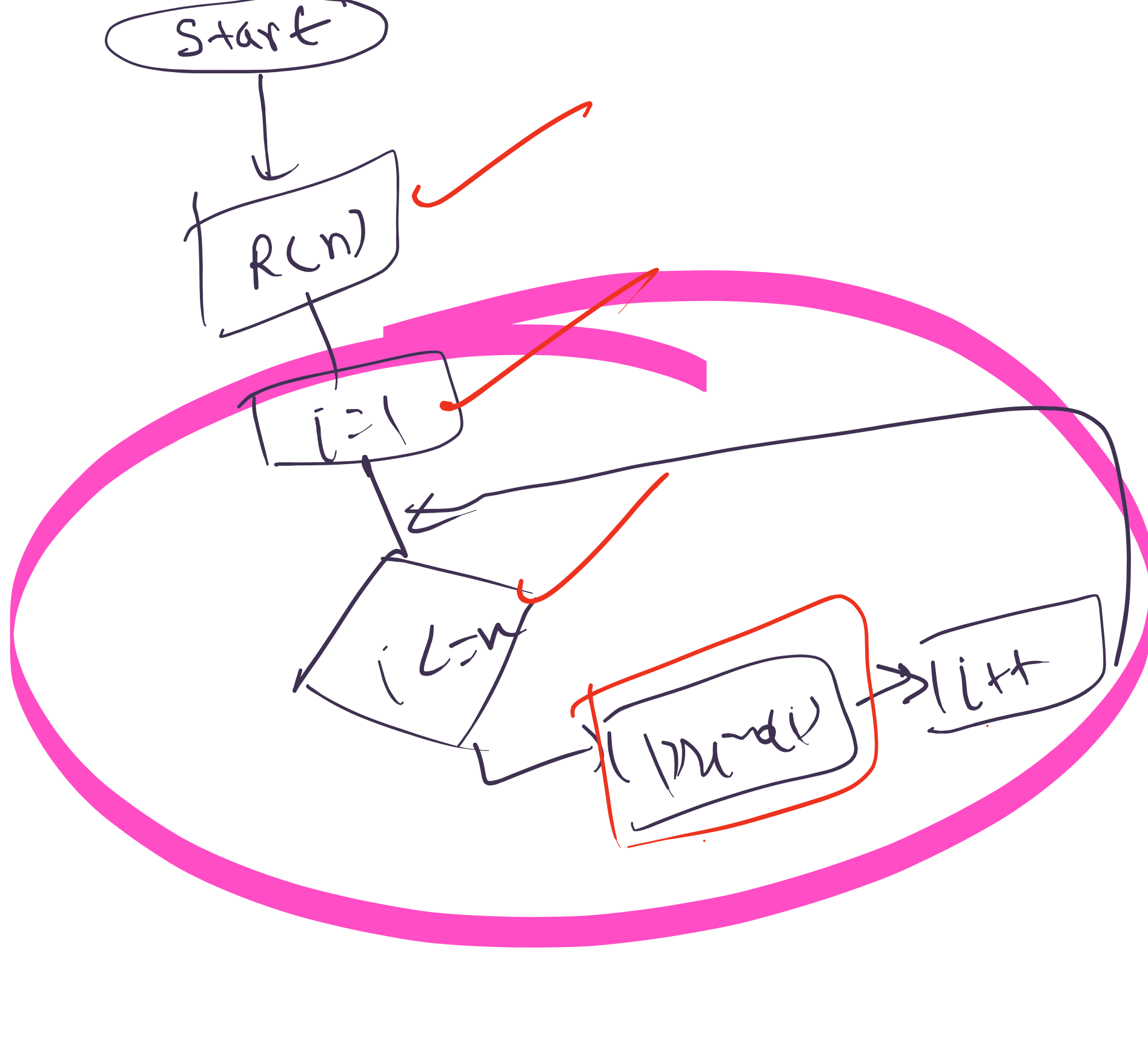


while for do while per each



1
2
3
4
5

```
public static void main(String[] args) {
    int n = 5;
    int i = 1;
    while (i <= n) {
        System.out.println(i);
        i++;
    }
}
```

$1+2+3+4+5 = 15$

n=5
i=1
i=2
i=3
i=4
i=5
i=6

1<=5
2<=5
3<=5
4<=5
5<=5
6<=5

```
public static void main(String[] args) {
    // TODO Auto-generated method stub
    int n = 5;
    int sum = 0;
    int i = 1;
    while (i <= n) {
        sum += i; // sum = sum + i;
        i++;
        System.out.println(sum);
    }
}
```

n=5
Sum=0
i=1
i=2
i=3
i=4
i=5

1<=5
2<=5
3<=5
4<=5
5<=5

Sum=0+1=1
Sum=1+2=3
Sum=3+3=6
Sum=6+4=10
Sum=10+5=15

Ques 1:

→ n = 5

```
* * * * *
* * * * *
* * * * *
* * * * *
* * * * *
```

int Row=1
int star=N

while (Row <= n) {
 // task loop
 int i=1
 while (i <= star) {
 System.out.print(" ");
 i++;
 }
 // next line prep
 System.out.println();
 Row++;
}

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

Row=1
Star=5

```
* * * * *
* * * * *
* * * * *
* * * * *
* * * * *
```

Ques 2:

n = 5

```
* * * * *
* * * * *
* * * * *
* * * * *
* * * * *
```

Row=1
Star=5

while (Row <= n) {
 // star
 int i=1
 while (i <= star) {
 System.out.print("x ");
 i++;
 }
 // next line prep
 System.out.println();
 Row++;
 Star++;
}

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

Row=1
Star=5

```
* * * * *
* * * * *
* * * * *
* * * * *
* * * * *
```

Ques 3:

n = 5

```
* * * * *
* * * * *
* * * * *
* * * * *
* * * * *
```

Ques 5:

n = 5

```
0 * * * * *
1 * * * * *
2 * * * * *
3 * * * * *
4 * * * * *
```

Row=1
Space=0
Star=n

while (Row <= N) {
 // space
 int i=1
 while (i <= space) {
 System.out.print(" ");
 i++;
 }
 // star
 int j=1
 while (j <= star) {
 System.out.print("x ");
 j++;
 }
 // next row prep
 System.out.println();
 Row++;
 Space++;
 Star--;
}

```
public static void main(String[] args) {
    // TODO Auto-generated method stub
    int n = 5;
    int row = 1;
    int space = 0;
    int star = n;
    while (row <= n) {
        // space
        int i = 1;
        while (i <= space) {
            System.out.print(" ");
            i++;
        }
        // star
        int j = 1;
        while (j <= star) {
            System.out.print("x ");
            j++;
        }
        // next row prep
        System.out.println();
        row++;
        space++;
        star--;
    }
}
```

Row=1
Star=5
Space=0

```
* * * * *
- * * * *
- - * * *
- - - * *
- - - - *
```

Ques 6:

n = 5

```
* * * * *
* * * * *
* * * * *
* * * * *
* * * * *
```

Ques 5:

n = 5

```
0 * * * * *
1 * * * * *
2 * * * * *
3 * * * * *
4 * * * * *
```

Space=0
Star=n
while (Row <= n) {
 // space
 // star

Ques 9:

n = 5

```
* * * * *
* * * * *
* * * * *
* * * * *
* * * * *
```

Row=1
Star=1
Space=n-1
while (Row <= n) {