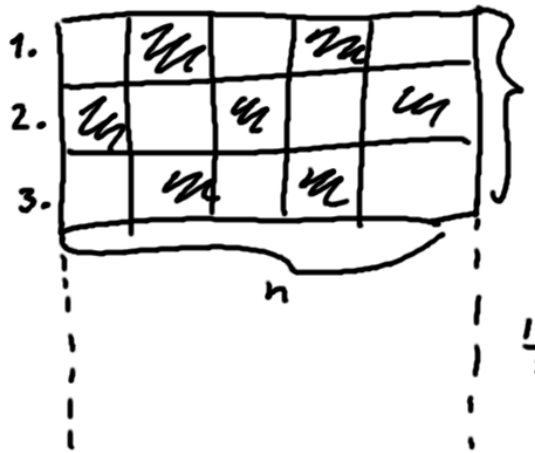
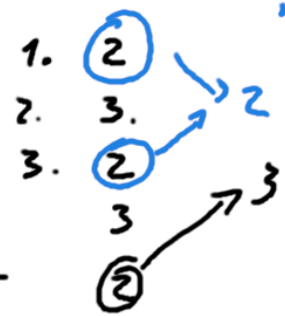
Zadatak sahovska tabla



$5 \cdot 3 = 15$

$\frac{15}{2} = 7$



$m = 3$

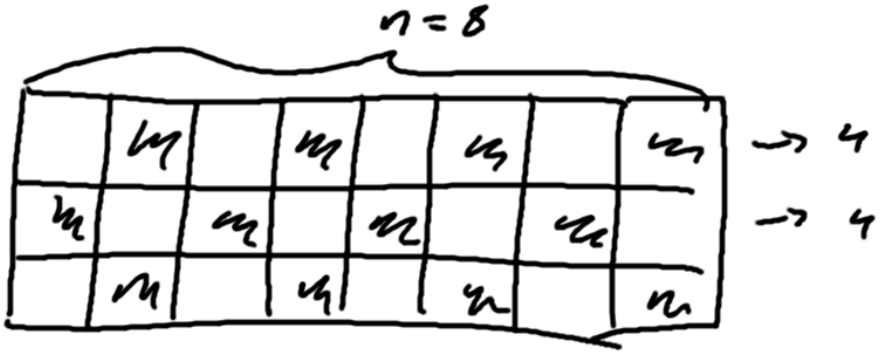
zaokruzeno na gore

$\lceil \frac{m}{2} \rceil$ - broj redova sa 2 crna

$\frac{3}{2} = 1.5 \quad \lceil 1.5 \rceil = 2$

$m - \lceil \frac{m}{2} \rceil$

2 crna $= \lfloor \frac{5}{2} \rfloor = \lfloor 2.5 \rfloor = 2$



$\lfloor \frac{n}{2} \rfloor \qquad \frac{8}{2} = 4$

1, 3, 5 ... redovi imaju $\lfloor \frac{n}{2} \rfloor$ crnih

2, 4, 6 .... Rel imaju $n - \lfloor \frac{n}{2} \rfloor$ crnih

neparnih redova: $\lceil \frac{m}{2} \rceil$

parnih : $m - \lceil \frac{m}{2} \rceil$

$n = 5$

1, 3, 5 → 2

$n = 8$

1, 3, 5... → 4

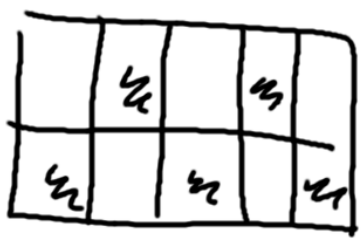
$\lfloor \frac{n}{2} \rfloor \cdot \lceil \frac{m}{2} \rceil +$

$(n - \lfloor \frac{n}{2} \rfloor) \cdot (m - \lceil \frac{m}{2} \rceil)$

3 bela 2 crna

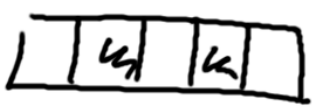
3 crna 2 bela

5 belih 5 crnih



crni = beli

+



$\lfloor \frac{m \cdot n}{2} \rfloor \qquad 5 \cdot 3 = 15$

$\frac{15}{2} = 7.5$

Grananje u C#

a, b – brojevi

c – max od a i b

ako a >= b
    c = a
inače
    c = b

```
if (a >= b)
    c = a;
else
    c = b;
```

Zadatak agr. stanje

temp:

ako je $t \leq 0$:
    čvrsto
inače ako je $t < 100$
    tečno
inače
    plinovito

```
if (t <= 0)
    čvrsto
else if (t < 100)
    tečno
else
    plinovito
```

t > 0
t = 2
t = 150
X
X
X

Ciklusi u C#

a = 1230000

br. se završava sa 0 <=> a je deljivo sa 10 (a % 10 == 0)

123000 = 1230000 / 10

br_nula = 0

dok god je a % 10 == 0

a = a / 10;

br_nula++;

ispo nad br_nula+=1

a = 0

while a % 10 == 0 ✓ ✓ ✗

a = a / 10;

br_nula++;

0 = 0/10 → a = 0

br_nula++

123 → 12 → 1 → 0

Zadatak sve cifre broja

a = 1234

4
3
2
1

Poslednja cifra:

a % 10;

Uklonim poslednju:

a /= 10;

a = 123

→ a % 10 = 3

a = 123/10 = 12

→ a % 10 = 2

a = a/10 = 1

→ a % 10 → 1

a = a/10 = 0

Obrnute cifre +37

X = 1234

Y = 0

Obrnute cifre +37

x = 1234

y = 0

---

dok god je x > 0

c = x % 10; Poslednja cifra od x

x = x / 10; odbacujem poslednju cifru

y = y · 10; dodajemo jednu nulu na y { y = 4 + 3
y = y · 10
y = 4730

y += c; dodajem c na y c = 4 → 4734

Kolacov problem

x = 7

7 → 22 → 11 → 34 → 17 → 52 → 26 → 13

Ako je x % 2 == 0

x = x / 2;

→ 40 → 20 → 10 → 5 → 16 → 8 → 4 → 2 → 1

Inace

x = 3 · x + 1;

10 → 5 → 16 → 8 → 4 → 2 → 1

6 → 3 → 10 → 5 → 16 → 8 → 4 → 2 → 1