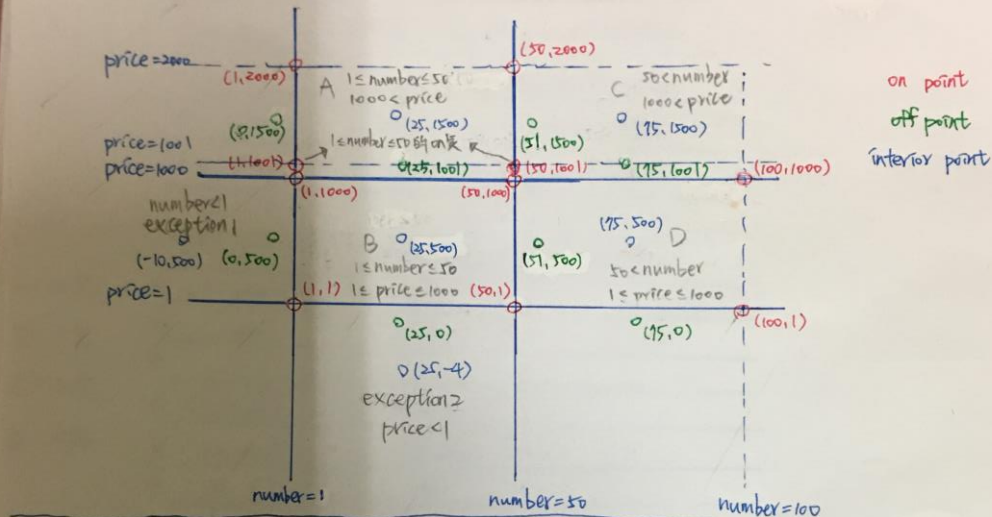


2a) weak Nx1 strategy



number < 1 (Exception 1) \Rightarrow on point = (1, 1000), (1, 1)

off point = (0, 500)

interior = (-10, 500)

price < 1 (Exception 2) \Rightarrow on point = (1, 1), (50, 1)

off point = (25, 0)

interior = (25, -4)

$1 \leq \text{number} \leq 50$ (B 5%) \Rightarrow on point = (1, 1000), (1, 1), (50, 1000), (50, 1)
off point = (0, 500), (25, 1001), (51, 500), (25, 0)
interior = (25, 500)

$50 < \text{number}$ (D 10%) \Rightarrow on point = (50, 1), (100, 1), (50, 1000), (100, 1000)
off point = (51, 500), (75, 0), (75, 1001)
interior = (75, 500)

$1 \leq \text{number} \leq 50$ (A 10%) \Rightarrow on point = (1, 2000), (1, 1001), (1, 1000), (50, 1000), (50, 1001)
off point = (0, 1500), (25, 1001), (51, 1500), (50, 2000)
interior = (25, 1500)

$50 < \text{number}$ (C 20%) \Rightarrow on point = (50, 1000), (50, 2000), (100, 1000)
off point = (51, 1500), (75, 1001)
interior = (75, 1500)

整理 → Test Method = int price (number, price)

Test Input	Expected Output
(-10, 500)	throw IllegalArgumentException
(25, -4)	throw IllegalArgumentException
(0, 1500)	throw IllegalArgumentException
(0, 500)	throw IllegalArgumentException
(25, 0)	throw IllegalArgumentException
(75, 0)	throw IllegalArgumentException
A (1, 2000)	1800
B (1, 1000)	950
B (1, 1)	1
A (50, 2000)	90000
B (50, 1000)	47500
B (50, 1)	48
D (100, 1000)	90000
D (100, 1)	90
A (25, 1500)	33750
A (25, 1001)	22523
B (25, 500)	11875
C (51, 1500)	61200
D (51, 500)	22950
C (75, 1500)	90000
C (75, 1001)	60060
D (75, 500)	33750
A (1, 1001)	90
A (50, 1001)	45045

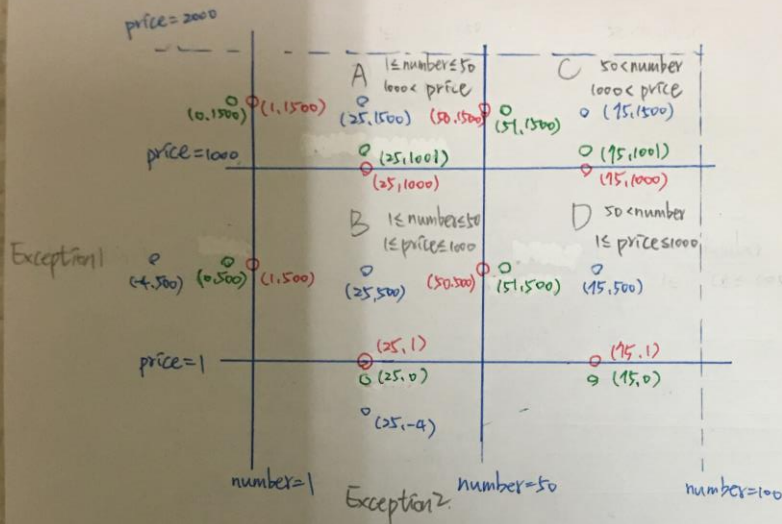
A = 10%

B = 5%

C = 20%

D = 10%

b) The weak 1x1 strategy



Exception 1 (number < 1) = On point = (1, 500)
 off point = (0, 500)
 interior = (-4, 500)

A ($1 \leq \text{number} \leq 50$, $1000 < \text{price}$) = On point = (1, 1500), (25, 1000), (50, 1500)
 off point = (0, 1500), (25, 1001), (51, 1500)
 interior = (25, 1500)

B ($1 \leq \text{number} \leq 50$, $1 \leq \text{price} \leq 1000$) = On point = (1, 500), (25, 1), (50, 500), (25, 1000)
 off point = (0, 500), (25, 0), (51, 500), (25, 1001)
 interior = (25, 500)

C ($50 < \text{number} < 100$, $1000 < \text{price}$) = On point = (50, 1500), (75, 1000)
 off point = (51, 1500), (75, 1001)
 interior = (75, 1500)

D ($50 < \text{number} < 100$, $1 \leq \text{price} \leq 1000$) = On point = (75, 1000), (50, 500), (75, 1)
 off point = (75, 1001), (51, 500), (75, 0)
 interior = (75, 500)

Exception 2 (price < 1) = On point = (25, 1)
 off point = (25, 0)
 interior = (25, -4)

The weak 1x1 strategy

整理 →

Test input	Expected output
(-4, 500)	throw IllegalArgumentException
(25, -4)	throw IllegalArgumentException
(0, 1500)	throw IllegalArgumentException
(0, 500)	throw IllegalArgumentException
(25, 0)	throw IllegalArgumentException
(95, 0)	throw IllegalArgumentException
(1, 1500)	1350
(1, 500)	475
(25, 1500)	33750
(25, 1001)	22523
(25, 1000)	23750
(25, 500)	11875
(25, 1)	24
(50, 1500)	67500
(50, 500)	23750
(51, 1500)	61200
(51, 500)	22950
(75, 1500)	90000
(75, 1001)	60060
(75, 1000)	67500
(75, 500)	33750
(75, 1)	68