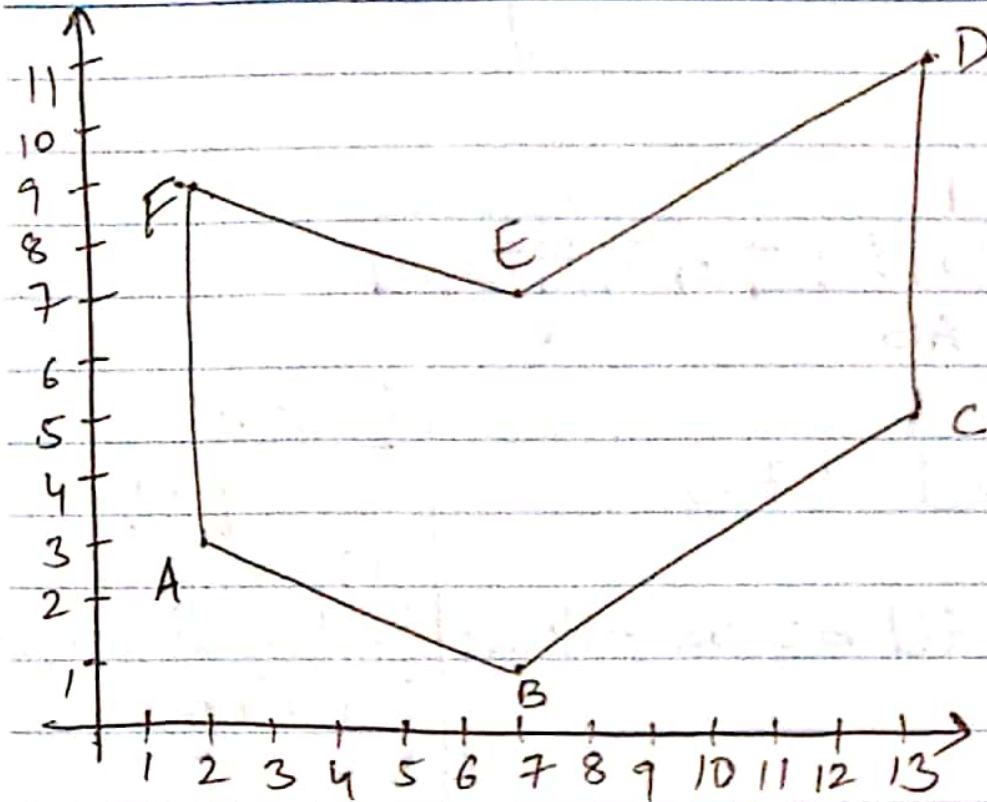


Example

Date : _____



Global edge table
initially

| | |
|----|---|
| | ! |
| 12 | λ |
| 11 | λ |
| 10 | λ |
| 9 | λ |
| 8 | λ |
| 7 | <div> <div>→</div> <div> <div>9</div> <div>7</div> <div>$-\frac{5}{2}$</div> <div></div> </div> <div>→</div> <div> <div>11</div> <div>7</div> <div>$\frac{3}{2}\lambda$</div> <div>λ</div> </div> </div> |
| 6 | λ |
| 5 | <div> <div>→</div> <div> <div>11</div> <div>13</div> <div>0</div> <div>λ</div> </div> </div> |
| 4 | λ |
| 3 | <div> <div>→</div> <div> <div>9</div> <div>2</div> <div>0</div> <div>λ</div> </div> </div> |
| 2 | λ |
| 1 | <div> <div>→</div> <div> <div>3</div> <div>7</div> <div>$-\frac{5}{2}$</div> <div></div> </div> <div>→</div> <div> <div>5</div> <div>7</div> <div>$\frac{3}{2}\lambda$</div> <div>λ</div> </div> </div> |
| 0 | λ |

EF

ED

CD

AF

AB

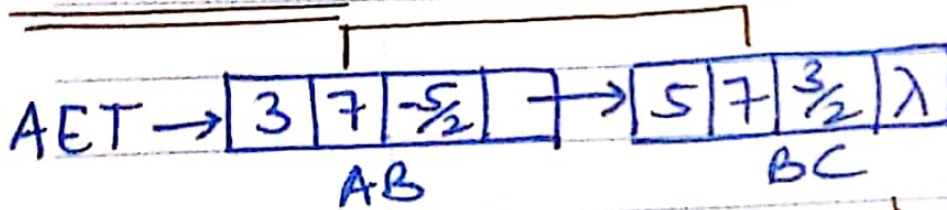
BC

$y_{max} z_{min} \frac{1}{m}$

Global edge table defined initially.

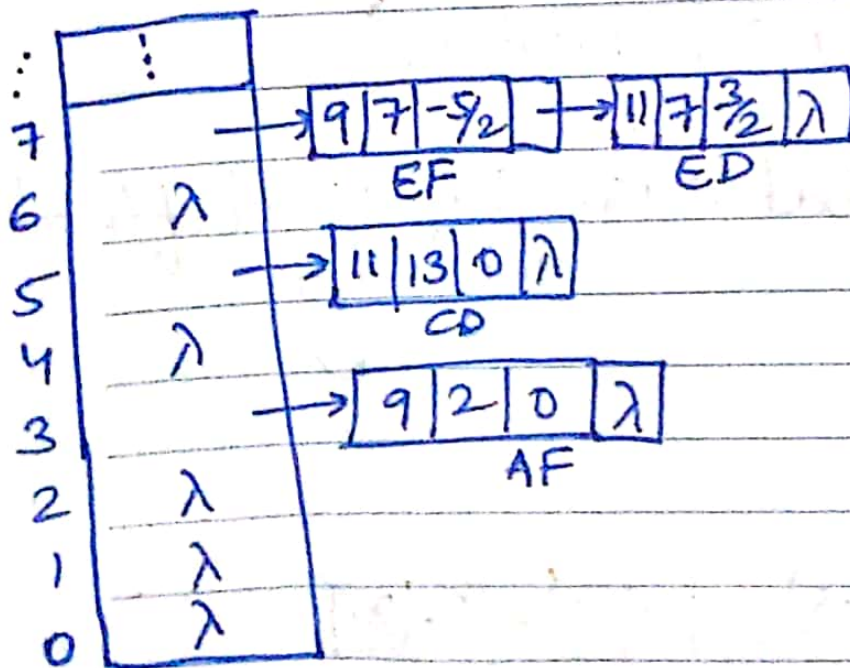
Initially AET is empty.

Scanline 1



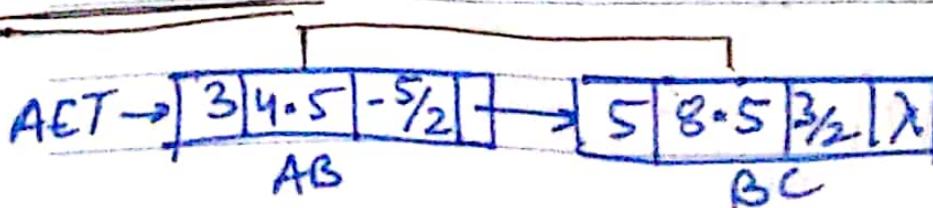
Fill pixel (7,1)

Now GET will be as follows:



Reason:
 x_{\min} of AB is integer, so it will be considered interior and x_{\min} of y is also integer and will be considered exterior.

Scanline 2



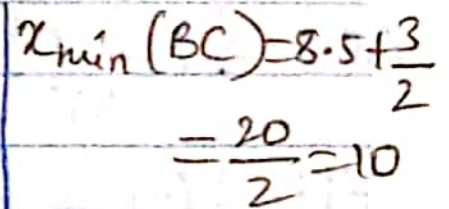
$$x_{k+1} = x_k + \frac{1}{m}$$

(Incremental algo. using edge coherence)

Fill pixel b/w $(5,2)$ to $(8,2)$

x_{\min} of BC is also fractional, so we round down to be strictly interior.

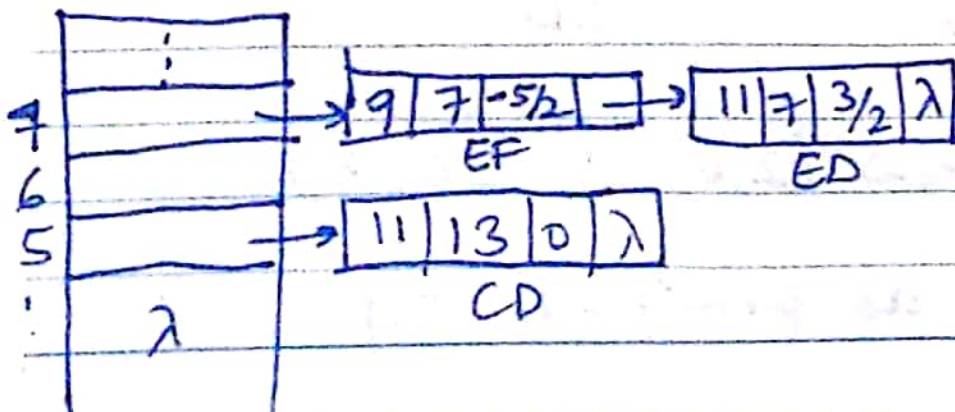
Scanline -3

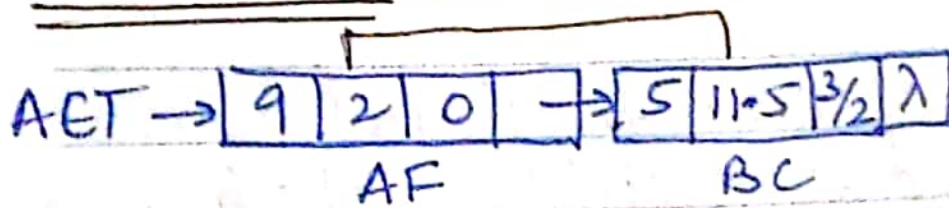


AB is removed from AET because according to the algorithm, we have to remove all the edges where y_{\max} is equal to the scanline (in this case 3).

Now we fill pixels between $(2,3)$ to $(19,3)$.

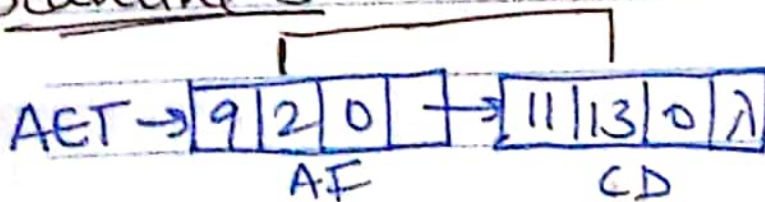
GET



Scanline 4

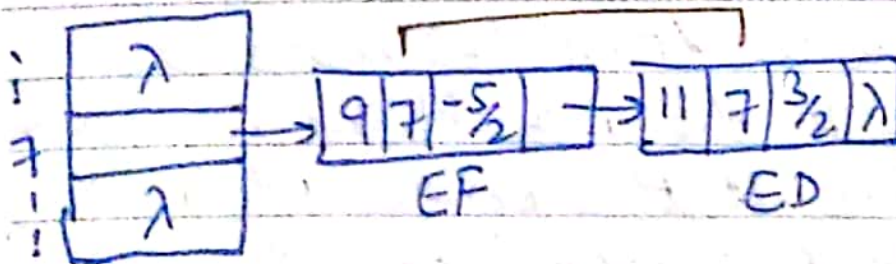
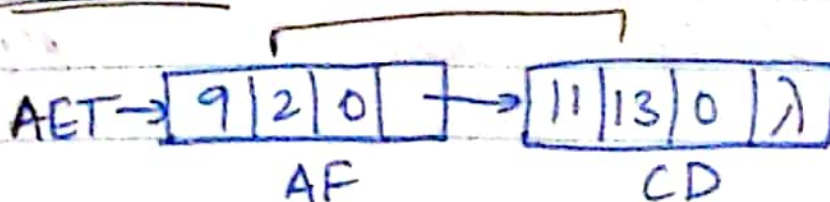
Now we fill pixels between (2,4) to (11,4)

GET same as previous step.

Scanline 5

Fill pixels b/w (2,5) to (12,5)

GET

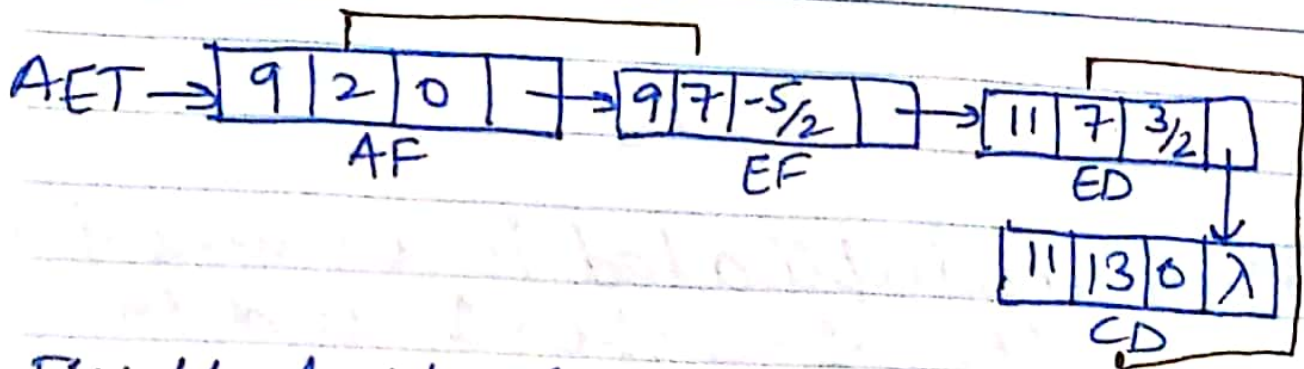
Scanline 6

Fill pixels b/w (2,6) to (12,6)

GET same as previous step.

Scanline 7

Date : _____



Fill pixels b/w (2,7) to (6,7) and (7,7) to (12,7)

GET → Empty

