[**Trapping Rain Water**](https://leetcode.com/problems/trapping-rain-water/)

**public** **class** TrappingRainWater {

**public** **static** **void** main(String[] args) {

// **TODO** Auto-generated method stub

**int**[] height = {0,1,0,2,1,0,1,3,2,1,2,1};

System.***out***.println(*trap*(height));

}

**public** **static** **int** trap(**int**[] height) {

**if**(height == **null** || height.length == 0) {

**return** 0;

}

**int** left\_max = 0;

**int** right\_max = 0;

**int** result = 0;

**int** i = 0;

**int** j = height.length - 1;

**while**(i < j) {

**if**(height[i] < height[j]) {

**if**(height[i] >= left\_max) {

left\_max = height[i];

}

**else** {

result += left\_max - height[i];

}

i++;

}

**else** {

**if**(height[j] >= right\_max) {

right\_max = height[j];

}

**else** {

result += right\_max - height[j];

}

j--;

}

}

**return** result;

}

}

Time Complexity : O(n) where n is length of array height

Space Complexity : O(1) constant space