

Rich Poor

## Exercise \_ Visualization Schelling's Segregation model

**1.-** We are going to measure the segregation in a district. For that, we develop a measure for segregation.

The blue blocks only for rich people and yellow only for Poor people, and green 50/50 = 50/50 and we consider 10 people in each block.

We are going to calculate the segregation of a district with the following distribution



- 1. Count the total number of rich B and yellow Y in the district
  - a. B=
  - b. Y=
- 2. Calculate the ratio between the total Rich people and total Poor people in each type of block
  - a. Blue blocks
    - i. (number of rich in the block(b)/total rich in the district(B))=
    - ii. (number of poor in the block(y)/total poor people in the district(Y))=
  - b. Yellow blocks
    - i. (number of rich in the block(b)/total rich in the district(B))=
    - ii. (number of poor in the block(y)/total poor people in the district(Y))=
  - c. Green
    - i. (number of rich in the block(b)/total rich in the district(B))=
    - ii. (number of poor in the block(y)/total poor people in the district(Y))=
- 3. In each type of block calculate the absolute difference between the rich and poor proportion |(b/B)-(y/Y)|
  - a. Blue blocks
    - i. |(b/B)-(y/Y)|=
  - b. Yellow blocks
    - i. |(b/B)-(y/Y)|=
  - c. Green
    - i. |(b/B)-(y/Y)| =
- 4. Calculate the total segregation multiplying the number of blocks of each type by the |(b/B)-(y/Y)|
- 5. Divide the result by 2, and that's the segregation index