# Execution Policies Solutions

# Execution Policies

- Write a program which exercises the following code and outputs the final values of vec

  ```cpp
  vector<int> vec(2000);

  int count {0};

  for_each(begin(vec), end(vec), [&] (int& x) { x = ++count; });
  ```

- Rewrite the program to use each of the C++17 execution policies in turn

# Execution Policies

- Compare the output from each program, explaining any unusual features
- No policy
  - Values will be from 1 to 2000. Will be in numerical order
- seq
  - Values will be from 1 to 2000. May not be in numerical order
- par
  - Values will be from 1 to n
  - If count is not protected against data races, n will differ from 2000.
  - May not be in numerical order
- par_unseq
  - Values will be from 1 to n
  - If count is not protected against data races, n will differ from 2000.
  - May not be in numerical order