## km::KMeansBase # int k # std::vector< Point > points # std::vector< Point > centroids # int number of iterations + KMeansBase(const int &k, const std::vector < Point > &points) + KMeansBase(const int &k) + virtual ~KMeansBase ()=default + virtual void run()=0 + auto getPoints() const -> std::vector< Point > + auto getCentroids() const -> std::vector < Point > + auto getIterations () const -> int

## km::KMeansMPI

- std::vector< std::pair</li>int, Point > > localpoints
- + KMeansMPI(const int &k, const std::vector
  - < Point > &points, std ::vector< std::pair< int,
- Point > > local\_points)
  + KMeansMPI(const int &k, std::vector< std
  - ::pair< int, Point > > local points)
- + void run() override

- km::KMeansOMP
- + KMeansOMP(const int &k, const std::vector < Point > &points)
- + void run() override

## km::KMeansSequential

- + KMeansSequential(const int &k, const std::vector < Point > &points)
  - + void run() override