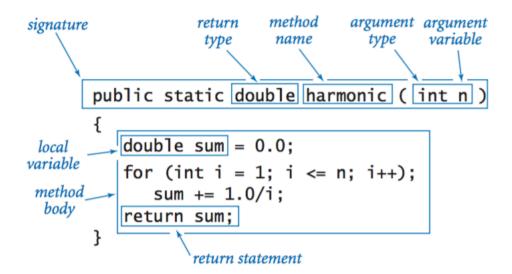
## **Anatomy of method:**



## Anatomy of class:

```
public class Charge -
                                                            class
               private final double rx, ry;
 instance
                                                           name
 variables
               private final double q;
               public Charge(double x0, double y0, double q0)
constructor
                   rx = x0; ry = y0; q = q0;
               public double potentialAt(double x, double y)
                                                              instance
                  double k = 8.99e09;
                                                              variable
                                                               names
                  double dx = x - rx;
                  double dy = y - ry;
                   return k * q / Math.sqrt(dx*dx + dy*dy)
 instance
 methods
               }
               public String toString()
                   return q +" at " + "("+ rx + ",
                                                         + ry +")";
               public static void main(String[] args)
test client
               {
                   double x = Double.parseDouble(args[0]);
                   double y = Double.parseDouble(args[1]);
     create
                  Charge c1 = new Charge(0.51, 0.63, 21.3);
      and
    initialize
                  Charge c2 = new Charge(0.13, 0.94, 81.9);
     object
                  double v1 = c1.potentialAt(x, y);
                                                                 invoke
                  double v2 = c2.potentialAt(x, y);
                                                               constructor
                  StdOut.prin\sqrt{f(\%.2e\n^{\circ}, (v1 + v2))};
               }
                                                         invoke
                         object
            }
                         name
                                                         method
```

## Object oriented design:

