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Implement BFGS

I have provided the file [rosenbrock_2Nd.m](#), which generates initial conditions for the BFGS method. For the initial condition, 18-dimensional initial condition returned by `rosenbrock_2Nd(x, -1)`.

Compare against full Newton optimization — count number of “outer iterations” $x_k \rightarrow x_{k+1}$, as well as “inner iterations” (linesearches / trust-region model rebuilds).

Check the Quasi-Newton convergence criteria (from lecture #5)

$$\lim_{k \rightarrow \infty} \frac{\|(B_k - \nabla^2 f(\bar{x}_k))\bar{p}_k\|}{\|\bar{p}_k\|} = 0$$

- $\vec{x}_0 = \text{rosenbrock_2Nd}(x, -1) ::$
returns $\vec{x}_0 \in \mathbb{R}^{18}$, to be used as the initial point.
The argument x is ignored.
- $\text{rosenbrock_2Nd}(x, 0) ::$
returns $f(x) \in \mathbb{R}$, for $x \in \mathbb{R}^{2m}$.
- $\text{rosenbrock_2Nd}(x, 1) ::$
returns $\nabla f(x) \in \mathbb{R}^{2m}$, for $x \in \mathbb{R}^{2m}$.
- $\text{rosenbrock_2Nd}(x, 2) ::$
returns $\nabla^2 f(x) \in \mathbb{R}^{2m \times 2m}$, for $x \in \mathbb{R}^{2m}$.