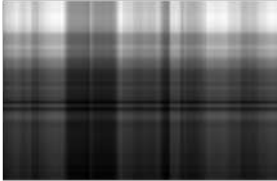
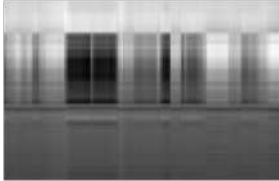




(a) Original image \mathbf{A} .



(b) Rank-1 approximation $\hat{\mathbf{A}}(1)$.



(c) Rank-2 approximation $\hat{\mathbf{A}}(2)$.



(d) Rank-3 approximation $\hat{\mathbf{A}}(3)$.



(e) Rank-4 approximation $\hat{\mathbf{A}}(4)$.



(f) Rank-5 approximation $\hat{\mathbf{A}}(5)$.