maximize: f(A)

subject to:

$$f(A) = \min_{A_{i1,j1} = A_{i2,j2}} \{ \sqrt{(i2 - i1)^2 + (j2 - j1)^2} \},$$

$$A \in R^{m \times n} \ , \ A_{i,j} \in \{0,1,2,3...47\}$$