K-最近邻算法（k-Nearest Neighbors）
KNN 基本思想
计算输入值的坐标与当前所有点的坐标距离（利用欧几里得距离），将这些距离保存在一个递增的列表里，获取 k 个最小的距离的值，在这些值中找到最主要的分类，即出现次数最多的类别，这个类别就是要预测的输入值的类别。

General approach to kNN
Collect: Any method.
Prepare: Numeric values are needed for a distance calculation. A structured dataformat is best.
Analyze: Any method.
Train: Does not apply to the kNN algorithm.
Test: Calculate the error rate.
Use: This application needs to get some input data and output structured num-eric values. Next, the application runs the kNN algorithm on this input data and determines which class the input data should belong to. The application then takes some action on the calculated class.
练习举例
产生如下图坐标所示的数据
