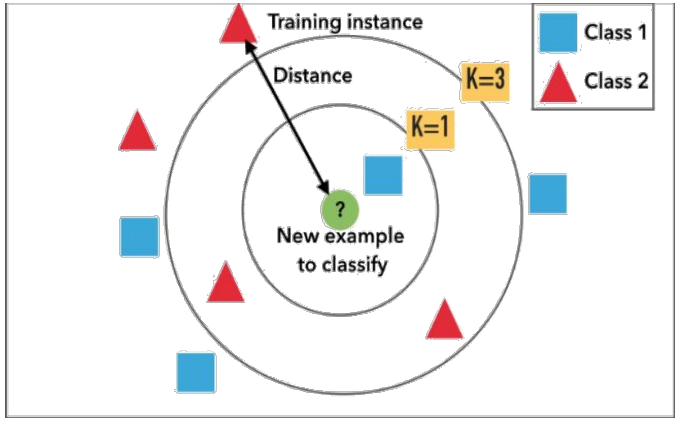
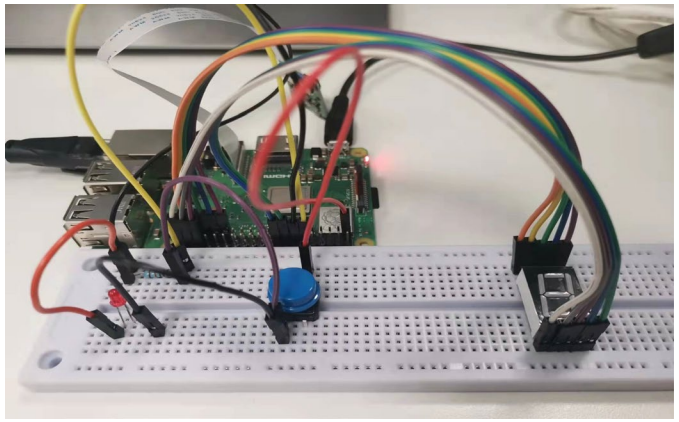
Handwritten Number Recognition





Raspberry Pi

Remote Control

GPIO

Pi Camera

Python

OpenCV

KNN algorithm

Image Processing

Circuit

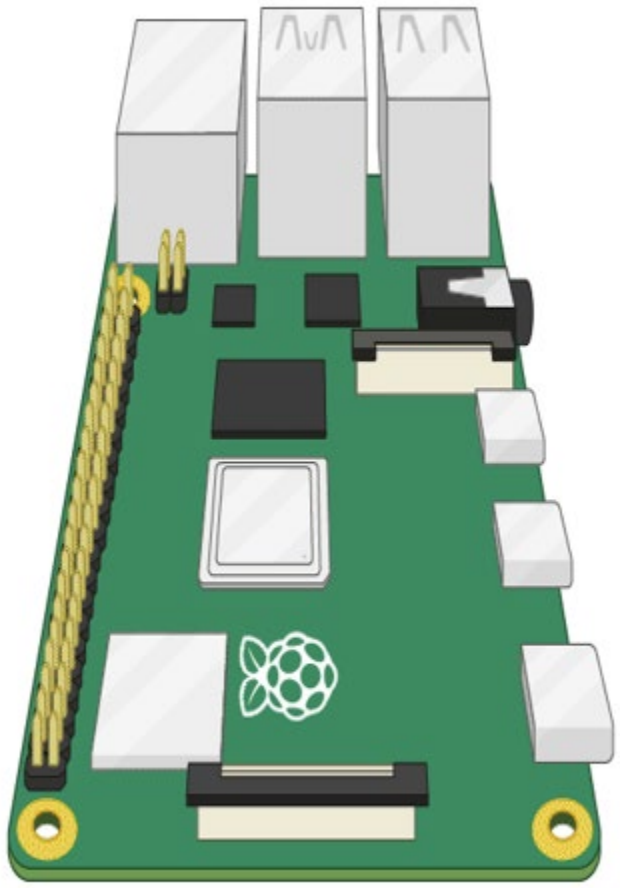
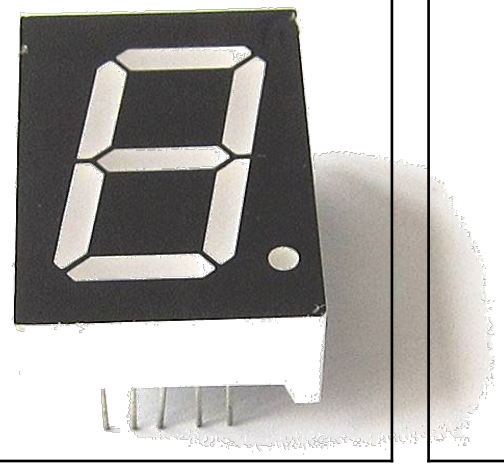
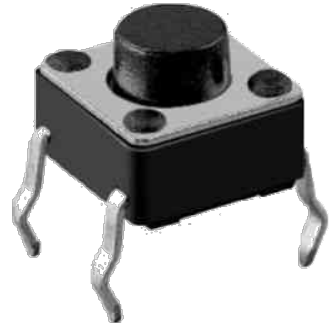
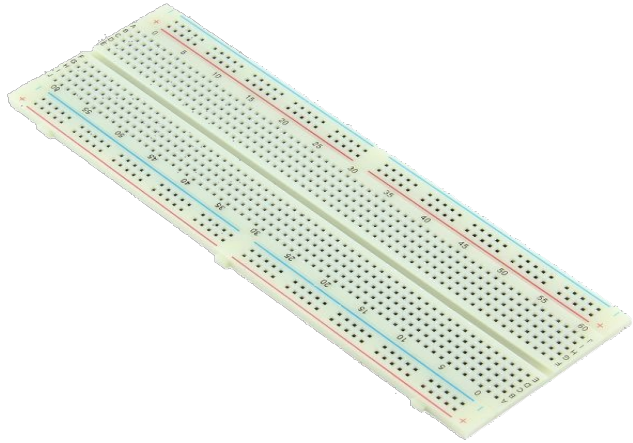
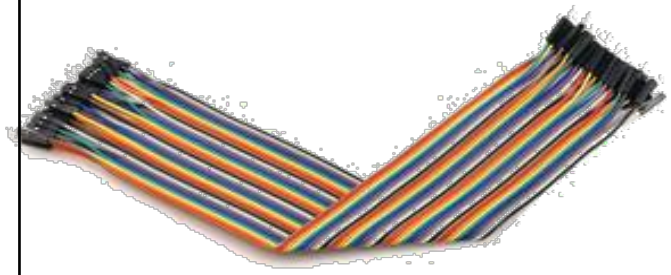
Circuit construction

Digital tube

Camera control

Handwritten Number Recognization

In this project, we will try to perform simple recognition of handwritten numbers. Raspberry Pi will be our platform, on which we will complete operations such as color gamut conversion, segmentation, and denoising of digital images. After that, we will complete the recognition of handwritten numbers based on the KNN algorithm. In addition, we will build a digital tube display circuit to display the results, and a camera control circuit to control the shooting of the camera.

分阶段任务

01	02	03	04	05	06
数据集	单行识别	识别精度	多行识别	数码管显示	拍摄识别
提取样本信息生成数据集	对单行手写数字进行识别	探究影响精度的因素并改善	对多行手写数字进行识别	搭建数码管电路以显示结果	使用摄像头拍摄后进行识别