# 实验10

## 实验目的：

* 熟悉字符串及规则表达式

## 实验要求：

* 按照题目要求写代码和实验报告.

## 实验题目：

## 一、基本题目

### 题目1

输出以下新闻片段中所有出现的单词（每个单词只输出一次）。

PITTSBURGH (AP) — Carnegie Mellon University will hire a researcher from the Library of Congress to help it decode a collection that includes two WWII German Enigma machines.

The university wants to encourage the study of 19th and 20th century computers, calculators, encryption machines and other materials related to the history of computer science.

“When we look back and we see this, we see who we remember,” Andrew Moore, dean of CMU’s School of Computer Science, said, adding his students are increasingly asking for courses about the history of the field. “We see people who took technology to save lives and save the world.”

Pamela McCorduck, a prolific author on the history and future of artificial intelligence and the widow of Joseph Traub, a renowned computer scientist and the former head of CMU’s Computer Science Department, permanently loaned to the university a collection of early computers, books and letters. The collection, anchored by a three-rotor and four-rotor Enigma machine, is on display in the Fine and Rare Book Room in CMU’s Hunt Library in Oakland. The gift makes CMU one of a few institutions in the United States with Enigma machines. Even fewer display them.

### 题目2：

对用户输入的用户名、密码、邮箱进行判断，若不满足输入要求则提示出错类型。

用户名要求：不能为空，只能由字母、数字和\_组成，第一位不能为数字。

密码要求：不能为空，密码长度至少8位，由字母、数字、下划线组成。

邮箱要求：不能为空，需包含”@”符号。”@”符号后需要出现多个由”. ”分割的词。

### 题目3：

*(Tokenizing Telephone Numbers)* Write an application that inputs a telephone number as a string in the form (555) 555-5555. The application should String method split to extract the area code as a token, the first three digits of the phone number as a token and the last four digits of the phone number as a token. The seven digits of the phone number should be concatenated into one string. Both the area code and the phone number should be printed. Remember that you’ll have to change delimiter characters during the tokenization process.