尝试编写 shell 脚本

在学习 shell 编程之前, 我学习过一学期的 Python, 所以在学习 shell 的过程中, 我有意识的将它和 Python 中的内容对应.

第一个 shell 程序名称 test.txt, 内容是:

```
#!/bin/bash
saluatation = "Hello"
exit 0
```

但是我发现运行出来结果是

```
test.txt: 行 3: saluatation: 未找到命令
```

原来我在等号的左右两边多打了两个空格, 在 Python 中这是推荐的, 但是这里就导致脚本不能正常运行, 于是我删掉了空格, 并增加了一行代码:

```
#!/bin/bash
saluatation="Hello"
echo 'The program $0 is now running'
exit 0
```

这里的 $0 表示命令行本身, 也就是应该输出

The program test.txt is now running

但是输出结果却是

The program $0 is now running

如果把一个 $ 变量放在双引号中, 程序执行到这里就会把变量替换成它的值, 但是如果在单引号中, 就不会发生替换现象

然后我修正了引号为双引号, 得到:

Hello

The program test.txt is now running

然后我学习了其他 $ 变量的用法, 完成了第一个程序

```
\#! /bin/bash
saluatation = "Hello"
echo "The program $0 is now running"
```

```
echo "The second paramater was $2"
echo "The first paramater was $1"
echo "The paramater list was $*
echo "The user's home directory is $HOME"
echo "please enter a new greeting"
read saluatation
echo $saluatation
echo "The script is now complete"
exit 0
```

这里的 read 相当于 input,echo 相当于 print 运行程序并先后输入 first,second 和 over

得到:

```
Hello
The program test.txt is now running
The second paramater was second
The first paramater was first
The paramater list was first second*
The user's home directory is /home/ljx
please enter a new greeting
over
over
The script is now complete
```

继续学习后, 我写了一段求数列$1^2, 2^2, \cdots, n^2, \cdots$前 n 项和的 shell 程序, 名为 test2.txt

!/bin/bash
echo "Plesse enter a num"
read num
sum=0

```
for i in `seq 1 $num`
do
sum=$[$i*$i+$sum]
done
echo $sum
exit 0
```

经过测试, 程序正确