实验5

实验5.1

```
Rectangle Area: 150000, Circumference: 1600
CRoundRectangle Area: 237854, Circumference: 1914.16
Program ended with exit code: 0
```

尽管从正方形是特殊的矩形这个角度来看，正方形可以作为矩形的派生类，但对于正方形来说，`setWidth()` 和 `setHeight()` 是冗余的，且容易引起错误，违反了LSP原则。所以正方形不能继承矩形。解决方案：创建一个新的抽象类作为正方形和矩形的父类，将矩形和正方形的共同行为，即正方形的边长/矩形的宽移动到这个抽象类中，矩形中单独定义长。

实验5.2

输出

```
1. abcd-efgh-abcd-
2. abcd-
3.
4. abcd-efgh-
5. efgh-
6. c
7. abcd-
8. ijAl-
9. ijAl-mnop
10. qrst-abcd-
11. abcd-qrst-abcd- uvw xyz
about
big
me
take
abcd
qrst-abcd-
Program ended with exit code: 0
```

实验5.3

输出

```
Testing for saving account.
Id is 08261831. Balance is 0. Last modified date is 2018/1/1
Add 5000 on 2018/1/5
Before: 0. Current: 5000. Cause for salary.
Add 5500 on 2018/2/14
Before: 5000. Current: 10500. Cause for lottery.
Settle 27.64 on 2018/3/31
Before: 10500. Current: 10527.6. Cause for settling.
Withdraw -2000 on 2018/4/10
Before: 10527.6. Current: 8527.64. Cause for house rent.
Settle 5.26 on 2018/5/15
Before: 8527.64. Current: 8532.9. Cause for settling.

Testing for credit account.
Id is 48329561. Balance is 0. Last modified date is 2018/1/1
Comsume 250 on 2018/1/15
Before: 0. Current: 250. Cause for shoes.
Settle 4.96 on 2018/2/1
Before: 250. Current: 254.96. Cause for settling.
Repay -255 on 2018/2/1
Before: 254.96. Current: -0.04. Cause for repay Janurary's bill.
Over Comsuming. Operation failed.
Comsume 360 on 2018/2/3
Before: -0.04. Current: 359.96. Cause for food.
Settle 10.92 on 2018/3/1
Before: 359.96. Current: 370.88. Cause for settling.
Repay -371 on 2018/3/4
Before: 370.88. Current: -0.12. Cause for repay February's bill.
Settle 0 on 2019/1/1
Before: -0.12. Current: -0.12. Cause for settling.
Comsume 150 on 2019/1/1
Before: -0.12. Current: 149.88. Cause for deduct annual fee.
Program ended with exit code: 0
```