**实验报告7**

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**实验名称： 计算机程序设计上机实验**

**实验要求：熟悉开发环境**

**实验题目：程序练习题**

**算法实现：（核心代码）**

1.字符串反转

def reverse(s):

if s == "":

return s

else:

return reverse(s[1:]) + s[0]

str = input('请输入一串字符：')

print(reverse(str))

2.日期1

import turtle, datetime

def drawGap():

turtle.penup()

turtle.fd(5)

def drawline(draw):

drawGap()

turtle.pendown() if draw else turtle.penup

turtle.fd(40)

drawGap()

turtle.right(90)

def drawDigit(d):

drawline(True) if d in [2,3,4,5,6,8,9] else drawline(False)

drawline(True) if d in [0,1,3,4,5,6,7,8,9] else drawline(False)

drawline(True) if d in [0,2,3,5,6,8,9] else drawline(False)

drawline(True) if d in [0,2,6,8] else drawline(False)

turtle.left(90)

drawline(True) if d in [0,4,5,6,8,9] else drawline(False)

drawline(True) if d in [0,2,3,5,6,7,8,9] else drawline(False)

drawline(True) if d in [0,1,2,3,4,7,8,9] else drawline(False)

turtle.left(180)

turtle.penup()

turtle.fd(20)

def drawDate(date):

turtle.pencolor("red")

for i in date:

if i == '-':

turtle.write('年',font=("Arial",18,"normal"))

turtle.pencolor("green")

turtle.fd(40)

elif i == '=':

turtle.write('月',font=("Arial",18,"normal"))

turtle.pencolor("blue")

turtle.fd(40)

elif i == '+':

turtle.write('日',font=("Arial",18,"normal"))

else:

drawDigit(eval(i))

def main():

turtle.setup(800,350,200,200)

turtle.penup()

turtle.fd(-350)

turtle.pensize(5)

drawDate(datetime.datetime.now().strftime('%Y-%m=%d+'))

turtle.hideturtle()

main()

3．日期2

import turtle, datetime

strcol = ['red','blue','green','yellow','pink','black','grey','gold','orange','darkgreen']

def drawGap():

turtle.penup()

turtle.fd(5)

def drawline(draw):

drawGap()

turtle.pendown() if draw else turtle.penup

turtle.fd(40)

drawGap()

turtle.right(90)

def drawDigit(d):

turtle.pencolor(strcol[d])

turtle.pencolor(strcol[0])

drawline(True) if d in [2,3,4,5,6,8,9] else drawline(False)

turtle.pencolor(strcol[1])

drawline(True) if d in [0,1,3,4,5,6,7,8,9] else drawline(False)

turtle.pencolor(strcol[2])

drawline(True) if d in [0,2,3,5,6,8,9] else drawline(False)

turtle.pencolor(strcol[3])

drawline(True) if d in [0,2,6,8] else drawline(False)

turtle.left(90)

turtle.pencolor(strcol[4])

drawline(True) if d in [0,4,5,6,8,9] else drawline(False)

turtle.pencolor(strcol[5])

drawline(True) if d in [0,2,3,5,6,7,8,9] else drawline(False)

turtle.pencolor(strcol[6])

drawline(True) if d in [0,1,2,3,4,7,8,9] else drawline(False)

turtle.left(180)

turtle.pencolor(strcol[7])

turtle.penup()

turtle.fd(20)

def drawDate(date):

turtle.pencolor("red")

for i in date:

if i == '-':

turtle.write('年',font=("Arial",18,"normal"))

turtle.pencolor("green")

turtle.fd(40)

elif i == '=':

turtle.write('月',font=("Arial",18,"normal"))

turtle.pencolor("blue")

turtle.fd(40)

elif i == '+':

turtle.write('日',font=("Arial",18,"normal"))

else:

drawDigit(eval(i))

def main():

turtle.setup(800,350,200,200)

turtle.penup()

turtle.fd(-350)

turtle.pensize(5)

drawDate(datetime.datetime.now().strftime('%Y-%m=%d+'))

turtle.hideturtle()

main()

**运算结果（截图）**





