《Python程序设计基础》A卷参考答案

第一题：

def huiwen(x):

"""

判断是否为回文

"""

h = x[::-1]

if h == x:

return True

else:

return False

n = input()

if huiwen(n):

print("Yes")

else:

print("No")

第二题：

def isFish(y,m,d):

"""

判断是打鱼还是晒网

"""

k = [[0, 31, 28, 31, 30, 31, 30, 31, 31, 30, 31, 30, 31],

[0, 31, 29, 31, 30, 31, 30, 31, 31, 30, 31, 30, 31]]

days = 0

for i in range(y - 2000):

if i % 4 == 0:

days += 366

else:

days += 365

if y % 4 == 0:

if m == 1:

days += d - 4

else:

if d > 4:

days += 31 - 4

else:

days += d - 4

for j in range(2, m):

days += k[1][j]

days += d

else:

if m == 1:

days += d - 4

else:

if d > 4:

days += 31 - 4

else:

days += d - 4

for j in range(2, m):

days += k[0][j]

days += d

return days % 5

date = input().split()

y, m, d = int(date[0]), int(date[1]), int(date[2])

if y < 2000 or (y == 2000 and (m == 1) and (d < 4)):

print("请输入2000年1月4日以后的日期")

else:

li = ("打鱼", "打鱼", "打鱼", "晒网", "晒网")

print(li[isFish(y, m, d)])

第三题：

def zongShu(x):

"""

找出众数

"""

li = {}

m = []

for i in x:

a = x.count(i)

li[i] = a

most = 0

for j in li.keys():

if most < li[j]:

most = li[j]

for j, i in li.items():

if most == i:

m.append(j)

return m

n = input().split()

for k in zongShu(n):

print(k, end=' ')

第四题：

def year(n):

if n == 1:

return 10

else:

return year(n-1) + 2

print(f"第五个人的年龄是: {year(5)}")

第五题：

from random import sample

from random import choice

count = 1

di = {}

card = {}

secret =set([])

for i in range(1,6):

a = choice(range(101))

if 10 <= a < 100:

b = "0" + str(a)

elif a == 100:

b = str(a)

else:

b = "00" + str(a)

card[i] = ("6102009" + b)

li = ('a', 'b', 'c', 'd', 'e', 'f', 'g', 'h', 'i', 'j', 'k', 'l', 'm', 'n',

'o', 'p', 'q', 'r', 's', 't', 'u', 'v', 'w', 'x', 'y', 'z', '0',

'1', '2', '3', '4', '5', '6', '7', '8', '9')

while len(secret) != 5:

st = sample(li\*5, 6)

st1 = ""

for j in st:

st1 += j

secret.add(st1)

for i in secret:

di[i] = card[count]

count += 1

for k, v in di.items():

print(f"{v} {k}")

第六题：

def fac(n):

mydict = {}

B = []

A = list(range(1, 27))

for i in range(26):

B.append(chr(ord('A') + i))

for i in range(26):

mydict[A[i]] = B[i]

for k, v in mydict.items():

if n == v:

return k

n = input()

st = ""

for j in n:

st += str(fac(j))

print(st)