**Algorithm exam part-4**

1.

array=eval(input())

found=False

for n in range(len(array)):

if not found and array[n]==7:

print("The first 7 is at index",n)

found=True

if not found:

print("Not found")

2.

array=[ 5, 9, 1]

index7=0

index=""

result=""

for n in range(len(array)):

if array[n]==7:

index=n

index7+=1

if index7>0:

result="The first 7 is at index "+str(index)

else:

result="Not found"

print(result)

3.

array=eval(input())

n=[]

result=""

for item in range(len(array)):

if array[item]==7:

n.append(item)

result=''

if len(n)==1:

result="The first 7 is at index : "+str(n[0])

elif len(n)==2:

result="The first 7 is at index : "+str(n[0])+" and "+str(n[1])

elif len(n)==3:

result="The first 7 is at index : "+str(n[0])+" and "+str(n[1])+", "+str(n[2])

elif len(n)==4:

result="The first 7 is at index : "+str(n[0])+", "+str(n[1])+", "+str(n[2])+", "+str(n[3])

else:

result="No 7 found"

print(result)

4.

found72=False

while not found72:

number=int(input())

if number !=72:

print("again")

else:

print("win")

found72=True

5.

found72=False

count=0

while not found72 and count<=4:

number=int(input())

count+=1

if number !=72 and count<4:

print("again")

elif count==4:

print("lost")

found72=True

else:

print("win")

6.

array=eval(input())

countcha=0

for n in range(len(array)):

if len(array[n])>=4 and len(array[n])<=6:

countcha+=1

if countcha==len(array):

print("GOOD")

else:

print("BAD")

7.

array=eval(input())

priceless=[]

for item in array:

if item["price"]<20:

priceless.append(item["name"])

print(priceless)