Design a program for creating machine that accepts three consecutive one.

```
a=input("enter the string")
l=len(a)
temp=0
check()
def check():
    for w in a:
        if w not in '01':
            print("Only 0/1 allowed")
            break
    else:
        q0(temp)

def q0(temp):
    if(temp<l):
        if(a[temp]=='1'):
            q1(temp)
        else:
            temp=temp+1

            q0(temp)
    else:
        print("invalid")



def q1(temp):

    temp=temp+1
```

```
    if(temp<l):
        if(a[temp]=='1'):
            q2(temp)
        else:
            q0(temp)
    else:
        print("invalid")


def q2(temp):

    temp=temp+1
    if(temp<l):
        if(a[temp]=='1'):
            q3(temp)
        else:
            q0(temp)
    else:
        print("invallid")
def q3(temp):

    print("valid")
```

Design a program for creating machine that accepts the string always ending with 101.

```
  def check():
    for w in a:
        if w not in '01':
            print("only 0/1 allowed")
```

```
        break
    else:
        q0(temp)

def q0(temp):
    if(temp<l):
        if(a[temp]=='1'):
            q1(temp)
        else:
            temp+=1
            q0(temp)
    else:
        print("invalid")
def q1(temp):
    temp+=1
    if(temp<l):
        if(a[temp]=='0'):
            q2(temp)
        else:
            q1(temp)
    else:
        print("invalid")

def q2(temp):
    temp+=1
    if(temp<l):
        if(a[temp]=='1'):
            q3(temp)
```

```
        else:
            q0(temp)
    else:
        print("invallid")
def q3(temp):
    temp+=1

    if(temp==l):
        print("valid")
    if(temp<l):

        if(a[temp]=='1'):
            q1(temp)
        elif(a[temp]=='0'):
            q2(temp)
```