

```

class Alient(object):
    """
    """

    def __init__(self, name, color):
        """ name is a string made of two small letters, color is "blue", "yellow" or "red" """
        assert (type(name) == str and len(name)==2 and name[0] in
"abcdefghijklmnopqrstuvwxyz" and
        name[1] in "abcdefghijklmnopqrstuvwxyz" and
        ((color=="blue" or color=="yellow" or color=="red")), "This in not an alient data"

        self.name = name
        self.color = color
    def get_name(self):
        return str(self.name)
    def get_color(self):
        return str(self.color)
    def set_name(self,newname):
        self.name=newname
    def set_color(self,newcolor):
        self.color=newcolor
    def __str__(self):
        return ( "alient:"+str(self.name)+":"+str(self.color))

    def __add__(self, other):

        if type(other)==SuperAlient:    # If other is a SuperAlient
            return SuperAlient(self.name,self.color)+Alient(other.name,other.color)

```

```

else:

    addname=self.name[0]+other.name[0]

    if (self.color=="blue" and other.color=="yellow") or (self.color=="yellow" and
other.color=="blue"):

        addcolor="red"

    elif (self.color=="blue" and other.color=="red") or (self.color=="red" and
other.color=="blue"):

        addcolor="yellow"

    elif (self.color=="yellow" and other.color=="red") or (self.color=="red" and
other.color=="yellow"):

        addcolor="blue"

    else:

        addcolor=self.color

    return Alient(addname,addcolor)

```

```

class SuperAlient(Alient):

    def __init__(self,name,color):

        Alient.__init__(self,name,color)

        self.degree="Lord"

    def __add__(self,other):

        addname=self.name[0]+other.name[0]

        if (self.color=="blue" and other.color=="yellow") or (self.color=="yellow" and
other.color=="blue"):

            addcolor="red"

        elif (self.color=="blue" and other.color=="red") or (self.color=="red" and
other.color=="blue"):

            addcolor="yellow"

        elif (self.color=="yellow" and other.color=="red") or (self.color=="red" and
other.color=="yellow"):

            addcolor="blue"

        else:

```

```

        addcolor=self.color

    return SuperAlient(addname,addcolor)

def __str__(self):
    return ( "Super alient:"+str(self.name)+":"+str(self.color)+":"+str(self.degree))

#2a
# class SuperAlient(Alient):
#     def __init__(self,name,color):
#         Alient.__init__(self,name,color)
#         self.degree="Lord"
#     def __add__(self,other):
#         """ merging two alients """
#
#         addname=self.name[0]+other.name[0]
#         if (self.color=="blue" and other.color=="yellow") or (self.color=="yellow" and
other.color=="blue"):
#             addcolor="red"
#         elif (self.color=="blue" and other.color=="red") or (self.color=="red" and
other.color=="blue"):
#             addcolor="yellow"
#         elif (self.color=="yellow" and other.color=="red") or (self.color=="red" and
other.color=="yellow"):
#             addcolor="blue"
#         else:
#             addcolor=self.color
#         return SuperAlient(addname,addcolor)
#
#     def __str__(self):
#         return ( "Super alient:"+str(self.name)+":"+str(self.color)+":"+str(self.degree))

#2b
# class SuperAlient(Alient):
#     def __init__(self,name,color):

```

```

#   Alient.__init__(self,name,color)
#   self.degree="Lord"
#   def __add__(self,other):
#       """ merging two alients """
#       assert (type(self)==SuperAlient and type(other)==SuperAlient)
#       addname=self.name[0]+other.name[0]
#       if (self.color=="blue" and other.color=="yellow") or (self.color=="yellow" and
other.color=="blue"):
#           addcolor="red"
#       elif (self.color=="blue" and other.color=="red") or (self.color=="red" and
other.color=="blue"):
#           addcolor="yellow"
#       elif (self.color=="yellow" and other.color=="red") or (self.color=="red" and
other.color=="yellow"):
#           addcolor="blue"
#       else:
#           addcolor=self.color
#       return SuperAlient(addname,addcolor)
#
#   def __str__(self):
#       return ( "Super alient:"+str(self.name)+":"+str(self.color)+":"+str(self.degree))

# a=Alient("xc","yellow")
# b=SuperAlient("ab","red")
# print(a+b)
# print(b+a)
# c=SuperAlient("xc","yellow")
# print (b+c)

```