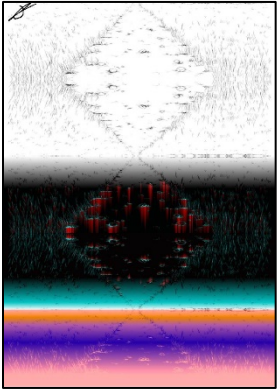


Karim Mahfouz

Completed



Original



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# Karim Mahfouz 03/15/2021
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```
def collage():  
    pic = makePicture(getMediaPath("a.jpg"))  
  
    canvas = makeEmptyPicture(getWidth(pic), 1000)  
  
    pic1(canvas)  
    pic2(canvas)  
    pic3(canvas)  
    pic4(canvas)  
    pic5(canvas)  
    sign(canvas)  
    explore(canvas)
```

```

def pic1(canvas):

    pic = makePicture(getMediaPath("a.jpg"))

    for x in range(getWidth(pic)):
        for y in range(getHeight(pic)):
            setColor(getPixel(canvas,x,y),getColor(getPixel(pic,x,y)))

def pic2(canvas):

    pic = makePicture(getMediaPath("a.jpg"))

    for x in range(getWidth(pic)):
        for y in range(getHeight(pic)):
            setColor(getPixel(canvas,x,200+y),getColor(getPixel(pic,x,getHeight(pic)-y-1)))

def pic3(canvas):
    pic = makePicture(getMediaPath("a.jpg"))

    for x in range(getWidth(pic)):

        numr = 0
        numg = 0
        numb = 0
        for y in range(getHeight(pic)):

            setColor(getPixel(canvas,x,400+y), makeColor(abs(numr - getRed(getPixel(pic,x,y))),
                abs(numg - getGreen(getPixel(pic,x,y))), abs(numb -getBlue(getPixel(pic,x,y))))

            if numr > getRed(getPixel(pic,x,y)):
                numr = getRed(getPixel(pic,x,y))
            else:
                numr = numr+3

            if numg > getGreen(getPixel(pic,x,y)):
                numg == getGreen(getPixel(pic,x,y))
            else:
                numg = numg+3

            if numb > getBlue(getPixel(pic,x,y)):

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        numb ==getBlue (getPixel (pic,x,y))
    else:
        numb = numb+3

def pic4(canvas):

    pic = makePicture(getMediaPath("a.jpg"))
    for x in range(getWidth(pic)):

        numr = 0
        numg = 0
        numb = 0
        for y in range(getHeight(pic)):

            setColor(getPixel (canvas,x,getHeight (canvas)-y-201), makeColor(abs(numr - getRed(getPixel (pic,x,y))), abs(numg - getGreen(getPixel (pic,x,y))), abs(numb -getBlue (getPixel (pic,x,y))))

            if numr > getRed(getPixel (pic,x,y)):
                numr = getRed(getPixel (pic,x,y))
            else:
                numr = numr+13

            if numg > getGreen(getPixel (pic,x,y)):
                numg == getGreen (getPixel (pic,x,y))
            else:
                numg = numg+3

            if numb > getBlue (getPixel (pic,x,y)):
                numb ==getBlue (getPixel (pic,x,y))
            else:
                numb = numb+3

def pic5(canvas):

    pic = makePicture (getMediaPath ("a.jpg"))
    empty = makeEmptyPicture (getWidth (pic),getHeight (pic))

    for x in range (getWidth (pic)):
        numr = 0
        numg = 0
        numb = 0

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for y in range(getHeight(pic)):
    setColor(getPixel(empty,x,y), makeColor(abs(numr + getRed(getPixel(pic,x,y))),
        abs(numg + getGreen(getPixel(pic,x,y))), abs(numb + getBlue(getPixel(pic,x,y))))
    if numr > getRed(getPixel(pic,x,y)):
        numr = getRed(getPixel(pic,x,y))
    else:
        numr = numr-13

    if numg > getGreen(getPixel(pic,x,y)):
        numg == getGreen(getPixel(pic,x,y))
    else:
        numg = numg-3

    if numb > getBlue(getPixel(pic,x,y)):
        numb ==getBlue(getPixel(pic,x,y))
    else:
        numb = numb-3

blend(empty)
place5(empty,canvas)

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def place5(pic,canvas):
    for x in range(getWidth(pic)):
        for y in range(getHeight(pic)):
            setColor(getPixel(canvas,x,y+799),getColor(getPixel(pic,x,y)))

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```

def blend(pic):

    for x in range(getWidth(pic)):

        for y in range(getHeight(pic)):

            r = getRed(getPixel(pic,x,y))
            g = getGreen(getPixel(pic,x,y))
            b = getBlue(getPixel(pic,x,y))

            r2 = g+40
            g2 = b/1.5
            b2 = r/1.5

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color= makeColor(r2,g2,b2)
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setColor(getPixel(pic,x,y), color)
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```
def sign(canvas):  
    sign = makePicture(getMediaPath("sign.jpg"))  
  
    for p in getPixels(sign):  
        x = getX(p)  
        y = getY(p)  
        if getRed(p)+getBlue(p)+getGreen(p) <765:  
            setColor(getPixel(canvas,x,y),black)
```

Note: `↵` means that the line is continued on the next line.