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def assign3PartA():  
    file = pickAFile()  
    picture = makePicture(file)  
    startX = getWidth(picture)/2 - 60  
    startY = 30  
    X = getWidth(picture)/2 - 60  
    Y = 500  
    c1 = makeColor(255,100,50)  
    c2 = makeColor(0,0,255)  
    text1 = "Fish"  
    text2 = "Like to swim! "  
    addTextToPic(picture,c1,text1,startX,startY)  
    addTextToPic(picture,c2,text2,X,Y)  
    show (picture)  
  
def addTextToPic(p,c,text,startX,startY):  
    if startX < 0 or startX >getWidth(p):  
        startX = getWidth(p)/2  
    if startY < 0 or startY > getHeight(p):  
        startY = getHeight(p)/2  
  
    addText(p,startX,startY,text,c)  
  
def assign3PartB():  
    minOvals = 1  
    maxOvals = 100  
    minWidth = 40  
    minHeight = 60  
    width = 640  
    height = 480  
    randomOvals(minOvals,maxOvals,minWidth,minHeight,width,height)  
  
def randomOvals(minOvals,maxOvals,minWidth,minHeight,width,height):  
    import random  
    canvas = makeEmptyPicture(width,height,black)  
    numberOvals = 0  
    X = 0  
    Y = 0  
    color = 0  
    Area = 0  
    Width = 0  
    Height = 0  
  
    ovals = random.randrange(minOvals,maxOvals+1)  
    for oval in range(1,ovals +1 ):  
        r = random.randrange(256)  
        g = random.randrange(256)  
        b = random.randrange(256)  
        randomcolor = makeColor(r,g,b)  
        startX = random.randrange(0, getWidth(canvas))  
        startY = random.randrange(0, getHeight(canvas))  
        randomheight = random.randrange(minWidth, minWidth + 50)  
        randomwidth = random.randrange(minWidth, minWidth + 10)
```

```
addOvalFilled(canvas, startX, startY, randomwidth, randomheight, randomcolor)
area = randomwidth * randomheight
Ovalnumber = "The total number of ovals: " + str(ovals)
addText(canvas, (width/2-60), 20, Ovalnumber, white)

show(canvas)
```